

=> fil cap  
 FILE 'CAPLUS' ENTERED AT 11:15:40 ON 19 JUN 2009  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 19 Jun 2009 VOL 150 ISS 26  
 FILE LAST UPDATED: 18 Jun 2009 (20090618/ED)  
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009  
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

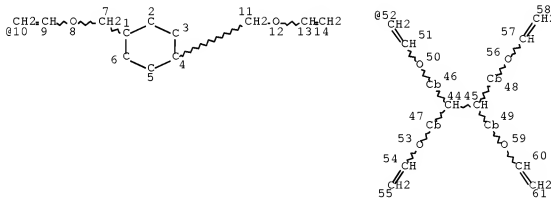
CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que 134  
 L18 STR



G1 62

29 . - 37 . -



ACCESSION NUMBER: 2005:99568 CAPLUS Full-text  
 DOCUMENT NUMBER: 142:157023  
 TITLE: curable vinyl ether curing compositions containing  
 polyvalent phenolic compounds for cured products with  
 low dielectric constant  
 INVENTOR(S): Saito, Seiichi  
 PATENT ASSIGNEE(S): Asahi Denka Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 23 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005010098	A1	20050203	WO 2004-JP10095	20040715
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
JP 2005154448	A	20050616	JP 2003-278953	20030724
EP 1650259	A1	20060426	EP 2004-747561	20040715
R: DE, FR, GB				
US 20060178454	A1	20060810	US 2005-560815	20051215
KR 2006038951	A	20060504	KR 2005-724945	20051226
PRIORITY APPLN. INFO.:			JP 2003-278953	A 20030724
			WO 2004-JP10095	W 20040715
AB	The composition, useful for laminates, especially, buildup laminates, comprises a polyvalent vinyl ether compound and a polyvalent phenolic compound. Thus, a composition comprised 1,4-cyclohexanedimethyl divinyl ether 100, FR 53194 (polyvalent phenolic compound) 62.1, Milex XLC-LL (polyvalent phenolic compound) 62.1, Aerosil 200 (silica) 12.4, SO-E 5 (spherical silica) 37.3, [1,3-phenylenebis(methylene)]bis(phosphoramidic acid) tetra-Ph ester 24.3, ethylene glycol Bu ether acetate 100 and 2-ethyl-4-methylimidazole 7.1 parts was mixed and cured, showing glass transition temperature 125°, specific dielec. constant (2GHz) 2.9 and absorption 0.25%.			
IC	ICM C08L065-00 ICS C08G059-00; C08K005-5399			
CC	37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 38, 76			
IT	Fillers Fire-resistant materials Fireproofing agents (curable vinyl ether curing compns. containing polyvalent phenolic compds. for cured products with low dielec. constant)			
IT	830351-48-9P 830351-49-0P 830351-51-4P 830351-52-5P 830351-54-7P RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (curable vinyl ether curing compns. containing polyvalent phenolic compds. for cured products with low dielec. constant)			
IT	382596-6-9			

RL: MOA (Modifier or additive use); USES (Uses)  
 (fireproofing agent; curable vinyl ether curing compns.  
 containing polyvalent phenolic compds. for cured products with low dielec.  
 constant)

IT 830351-48-9P 830351-49-0P 830351-51-4P  
 830351-52-5P 830351-54-7P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM  
 (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (curable vinyl ether curing compns. containing polyvalent phenolic compds.  
 for cured products with low dielec. constant)

RN 830351-48-9 CAPLUS

CN Phenol, polymer with 1,4-bis(methoxymethyl)benzene,  
 1,1'-(1-methylethylidene)bis[4-[2-(ethenyloxy)ethoxy]benzene] and Sumilit  
 PR 53194 (9CI) (CA INDEX NAME)

CM 1

CRN 119792-27-7

CMF Unspecified

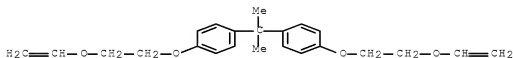
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 52411-04-8

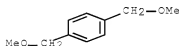
CMF C23 H28 O4



CM 3

CRN 6770-38-3

CMF C10 H14 O2



CM 4

CRN 108-95-2

CMF C6 H6 O



RN 830351-49-0 CAPLUS

CN Phenol, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane,  
1,4-bis(methoxymethyl)benzene and Sumilit PR 53194 (9CI) (CA INDEX NAME)

CM 1

CRN 119792-27-7

CMF Unspecified

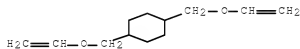
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 17351-75-6

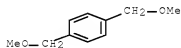
CMF C12 H20 O2



CM 3

CRN 6770-38-3

CMF C10 H14 O2



CM 4

CRN 108-95-2

CMF C6 H6 O



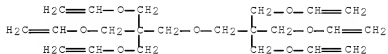
RN 830351-51-4 CAPLUS

CN Phenol, polymer with 1,4-bis(methoxymethyl)benzene and  
 1,1'-oxybis[3-(ethenyloxy)-2,2-bis[(ethenyloxy)methyl]propane] (9CI) (CA  
 INDEX NAME)

CM 1

CRN 830351-50-3

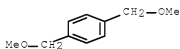
CMF C22 H34 O7



CM 2

CRN 6770-38-3

CMF C10 H14 O2



CM 3

CRN 108-95-2

CMF C6 H6 O



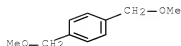
RN 830351-52-5 CAPLUS

CN Formaldehyde, polymer with 1,4-bis(methoxymethyl)benzene,  
 (ethenyloxy)benzene and phenol (9CI) (CA INDEX NAME)

CM 1

CRN 6770-38-3

CMF C10 H14 O2



CM 2

CRN 766-94-9

CMF C8 H8 O



CM 3

CRN 108-95-2

CMF C6 H6 O



CM 4

CRN 50-00-0

CMF C H2 O



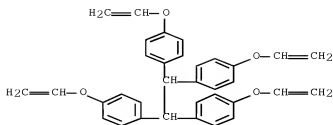
RN 830351-54-7 CAPLUS

CN Benzene, 1,1',1'',1'''-(1,2-ethanediylidene)tetrakis[4-(ethenyloxy)-,  
polymer with Sumilit PR 53194 (9CI) (CA INDEX NAME)

CM 1

CRN 830351-53-6

CMF C34 H30 O4



CM 2

CRN 119792-27-7

CMF Unspecified

CCI PMS, MAN

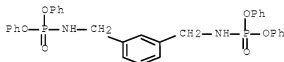
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 382596-16-9

RL: MOA (Modifier or additive use); USES (Uses)  
 (fireproofing agent; curable vinyl ether curing compns.  
 containing polyvalent phenolic compds. for cured products with low dielec.  
 constant)

RN 382596-16-9 CAPLUS

CN Phosphoramidic acid, N,N'-[1,3-phenylenebis(methylene)]bis-,  
 P,P,P',P'-tetraphenyl ester (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:261917 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 138:288093

TITLE: Phosphorus-containing carboxylic acid derivatives,  
 process for preparation thereof, and flame retardants  
 INVENTOR(S): Fujimura, Toshinobu; Waki, Kazunori; Sato, Koji;  
 Mibae, Shiro

PATENT ASSIGNEE(S): NOF Corporation, Japan

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003027208	A1	20030403	WO 2002-JP9675	20020920



W: CN, JP, KR, SG, US  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,  
 LU, MC, NL, PT, SE, SK, TR

EP 1433832 A1 20040630 EP 2002-767991 20020920  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI, CY, TR, BG, CZ, EE, SK

CN 1589308 A 20050302 CN 2002-822904 20020920  
 TW 243198 B 20051111 TW 2002-91121548 20020920  
 US 20040249028 A1 20041209 US 2004-488858 20040308  
 US 7186784 B2 20070306

PRIORITY APPLN. INFO.: JP 2001-287580 A 20010920  
 JP 2001-382317 A 20011214  
 JP 2002-132302 A 20020508  
 WO 2002-JP9675 W 20020920

AB The present invention relates to phosphorus-containing carboxylic acid derivs. bearing a group CO2CR1(CHR2R3)Y, a process for the preparation thereof, and flame retardants containing the derivs. as the active ingredient, wherein R1, R2, R3 = H or C1-18 hydrocarbon and Y = O or S. The invention provides phosphorus-containing carboxylic acid derivs. and flame retardants which are excellent in solubility in organic solvents, compatibility with various synthetic resins, stability, and flame retardancy. Thus, 30.1 parts Sanko-HCA itaconic acid and 19.9 parts itaconic acid were reacted in 30.0 parts methoxypropyl acetate at 122° for 2 h to give 48.4 g phosphorus-containing carboxylic acid with m.p. 196-198° and acid equivalent 172 g/mol, 53.4 parts of which was mixed with Pr vinyl ether 31.9, 2-butanone 14.7, and AP 8 phosphorus catalyst 0.05 parts and stirred at 85° for 3 h to give a phosphorus-containing carboxylic acid derivative with acid equivalent 8.32 g/mol, showing good solubility in acetone, Me iso-Bu ketone, acrylonitrile, methoxypropyl acetate, toluene, and Epikote 828 bisphenol epoxy resin, and storage stability. A composition comprising the resulting phosphorus-containing carboxylic acid derivative 5.54, YDPN 638 phenolic novolak epoxy resin 4.22, and Nofcure LC 1 latent catalyst 0.21 parts was applied on a tin plate and cured at 200° for 1 h to give a cured film with phosphorus content 4.1%, good appearance, solvent resistance, flame retardance (UL 94) V-0, and yellowing and heat resistance.

IC ICM C09K021-12  
 ICS C07F009-6574; C07F009-38; C07F009-40; C08L063-00; C08K005-49

CC 35-2 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 37, 38, 42, 73

ST phosphorus contg carboxylic acid deriv prepn flame retardance

IT Phenolic resins, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (epoxy, novolak, cured; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns.)

IT Coating materials  
 (fire-resistant; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns. for)

IT Epoxy resins, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (phenolic, novolak, cured; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns.)

IT Polyketones  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (polyether-, flame retardants; preparation of phosphorus-containing

- carboxylic acid derivs. for flame retardants for resin compns. for)
- IT Polyethers, preparation  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (polyketone-, flame retardants; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns. for)
- IT Fire-resistant materials  
 Fireproofing agents  
 Laminated plastic films  
 (preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns.)
- IT 25068-38-6, Epikote 828 97666-48-3, YDCN 701 105478-35-1, Epo Tohto YDPN 638 244772-00-7, EHPE 3150  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (cured; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns.)
- IT 503623-54-9P 503623-55-0P 503623-56-1P  
 503623-57-2P 503623-58-3P 503623-60-7P  
 503623-62-9P 503835-09-4P 503835-10-7P  
 503835-20-9P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (flame retardant; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants)
- IT 7440-50-8, 3EC III, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (foil, laminate with epoxy resin containing flame retardant; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns.)
- IT 503623-61-8P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
 (intermediate; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants)
- for flame retardants)
- IT 63562-33-4P 503623-59-4P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants)
- for flame retardants)
- IT 78-93-3, 2-Butanone, reactions 97-65-4, Itaconic acid, reactions 103-44-6, 2-Ethylhexyl vinyl ether 109-53-5, Isobutyl vinyl ether 762-04-9, Diethylhydrogen phosphite 764-47-6, Propyl vinyl ether 765-12-8, Triethylene glycol divinyl ether 926-02-3, tert-Butyl vinyl ether 3891-33-6, 1,4-Butanediol divinyl ether 4712-55-4, Diphenylhydrogen phosphite 17351-75-6 35948-25-5, Sanko HCA 37971-36-1, PBTC  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants)
- IT 25068-38-6, Epikote 828  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (cured; preparation of phosphorus-containing carboxylic acid derivs. for flame retardants for resin compns.)

RN 25068-38-6 CAPLUS  
 CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with  
 2-(chloromethyl)oxirane (CA INDEX NAME)

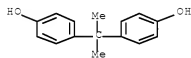
CM 1

CRN 106-89-8  
 CMF C3 H5 Cl O



CM 2

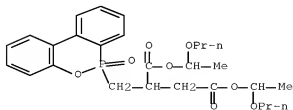
CRN 80-05-7  
 CMF C15 H16 O2



IT 503623-54-9P 503623-55-0P 503623-56-1P  
 503623-57-2P 503623-58-3P 503623-60-7P  
 503623-62-9P 503835-09-4P 503835-10-7P  
 503835-20-9P

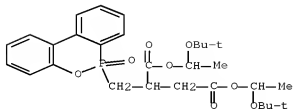
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP  
 (Preparation); USES (Uses)  
 (flame retardant; preparation of phosphorus-containing carboxylic acid  
 derivs. for flame retardants)

RN 503623-54-9 CAPLUS  
 CN Butanedioic acid, [(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]-  
 , bis(1-propoxyethyl) ester (9CI) (CA INDEX NAME)



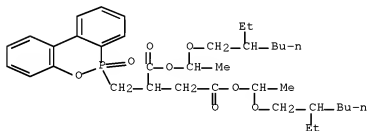
RN 503623-55-0 CAPLUS  
 CN Butanedioic acid, [(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]-

, bis[1-(1,1-dimethylethoxy)ethyl] ester (9CI) (CA INDEX NAME)



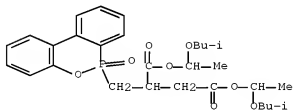
RN 503623-56-1 CAPLUS

CN Butanedioic acid, [(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]-, bis[1-[(2-ethylhexyl)oxy]ethyl] ester (9CI) (CA INDEX NAME)



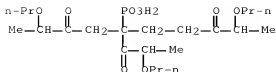
RN 503623-57-2 CAPLUS

CN Butanedioic acid, [(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]-, bis[1-(2-methylpropoxy)ethyl] ester (9CI) (CA INDEX NAME)



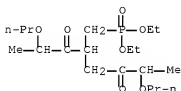
RN 503623-58-3 CAPLUS

CN Phosphonic acid, [4-oxo-1-(2-oxo-3-propoxybutyl)-1-(1-oxo-2-propoxypropyl)-5-propoxyhexyl]- (9CI) (CA INDEX NAME)



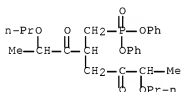
RN 503623-60-7 CAPLUS

CN Phosphonic acid, [4-oxo-2-(1-oxo-2-propoxypropyl)-5-propoxyhexyl]-, diethyl ester (9CI) (CA INDEX NAME)



RN 503623-62-9 CAPLUS

CN Phosphonic acid, [4-oxo-2-(1-oxo-2-propoxypropyl)-5-propoxyhexyl]-, diphenyl ester (9CI) (CA INDEX NAME)



RN 503835-09-4 CAPLUS

CN Poly[oxyethylideneoxy][[(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]-1,4-dioxo-1,4-butanediyl]oxyethylideneoxymethylene-1,4-cyclohexanediylmethylene] (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 503835-10-7 CAPLUS

CN Poly[oxyethylideneoxy][[(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]-1,4-dioxo-1,4-butanediyl]oxyethylideneoxy-1,4-butanediyl] (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 503835-20-9 CAPLUS

CN Poly[oxyethylideneoxy-1,2-ethanediylloxy-1,2-ethanediylloxy-1,2-ethanediylloxyethylideneoxy][[(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]-1,4-dioxo-1,4-butanediyl]] (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 503623-61-8P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP

(Preparation); USES (Uses)

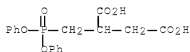
(intermediate; preparation of phosphorus-containing carboxylic acid derivs.

for

flame retardants)

RN 503623-61-8 CAPLUS

CN Butanedioic acid, 2-[(diphenoxyphosphinyl)methyl]- (CA INDEX NAME)



IT 63562-33-4P 503623-59-4P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
(Reactant or reagent)

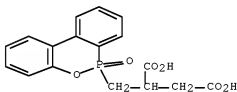
(intermediate; preparation of phosphorus-containing carboxylic acid derivs.

for

flame retardants)

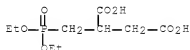
RN 63562-33-4 CAPLUS

CN Butanedioic acid, 2-[(6-oxido-6H-dibenz[c,e][1,2]oxaphosphorin-6-yl)methyl]- (CA INDEX NAME)



RN 503623-59-4 CAPLUS

CN Butanedioic acid, 2-[(diethoxyphosphinyl)methyl]- (CA INDEX NAME)

IT 762-04-9, Diethylhydrogen phosphite 4712-55-4,  
Diphenylhydrogen phosphite 17351-75-6 35948-25-5,  
Sanko HCA 37971-36-1, PBTC

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of phosphorus-containing carboxylic acid derivs. for  
flame retardants)

RN 762-04-9 CAPLUS

CN Phosphonic acid, diethyl ester (CA INDEX NAME)



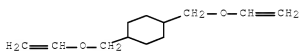
RN 4712-55-4 CAPLUS

CN Phosphonic acid, diphenyl ester (CA INDEX NAME)



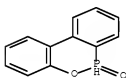
RN 17351-75-6 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



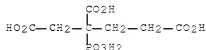
RN 35948-25-5 CAPLUS

CN 6H-Dibenz[c,e][1,2]oxaphosphorin, 6-oxide (CA INDEX NAME)



RN 37971-36-1 CAPLUS

CN 1,2,4-Butanetricarboxylic acid, 2-phosphono- (CA INDEX NAME)



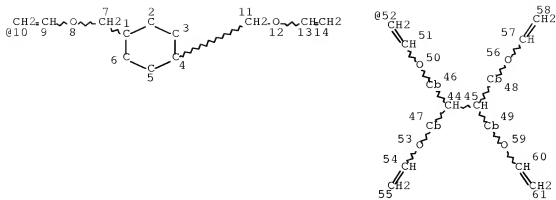
REFERENCE COUNT:

6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d que 135  
L18

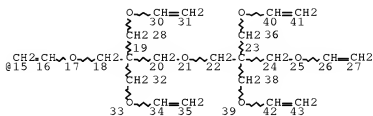
STR



G1 62

29 . - 37 . -

Page 1-A



Page 2-A

VAR G1=10/52/15

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ELEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 62

STEREO ATTRIBUTES: NONE

L20 272 SEA FILE=REGISTRY SSS FUL L18

L24 325 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L20

L26 TRANSFER PLU=ON L24 1- RN : 2814 TERMS

L27 2814 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L26

L28 73 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L27 AND P/ELS

L29 STR





NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RSPEC 1  
 NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE  
 L31 196 SEA FILE=REGISTRY SUB=L27 SSS FUL L29  
 L32 21 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L20 AND L31 AND L28  
 L34 2 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L32 AND (?FIRE? OR  
 ?FLAME?)  
 L35 19 SEA FILE=CAPLUS SPE=ON ABB=ON PLU=ON L32 NOT L34

=> d l35 ibib abs hitstr tot  
 THE ESTIMATED COST FOR THIS REQUEST IS 107.16 U.S. DOLLARS  
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L35 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:1102363 CAPLUS Full-text  
 DOCUMENT NUMBER: 149:366322  
 TITLE: Anti-reflective coatings using vinyl ether  
 crosslinkers  
 INVENTOR(S): Guerrero, Douglas J.; Mercado, Ramil-Marcelo L.  
 PATENT ASSIGNEE(S): Brewer Science Inc., USA  
 SOURCE: PCT Int. Appl., 37pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008109198	A1	20080912	WO 2008-US51948	20080124
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

US 20070207406 A1 20070906 US 2007-683309 20070307  
 PRIORITY APPLN. INFO.: US 2007-683309 A 20070307  
 US 2004-566329P P 20040429  
 US 2005-105862 A2 20050414

AB Novel, developer soluble anti-reflective coating compns. and methods of using those compns. are provided. The compns. comprise a polymer and/or oligomer having acid functional groups and dissolved in a solvent system along with a cross linker, a photoacid generator, and optionally a chromophore. The preferred acid functional group is a carboxylic acid, while the preferred crosslinker is a vinyl ether crosslinker. In use, the compns. are applied to a substrate and thermally crosslinked. Upon exposure to light (and optionally a post exposure bake), the cured compns. will decrosslink, rendering them soluble in typical photoresist developing solns. (e.g., alkaline developers). In one embodiment, the compns. can be used to form ion implant areas in microelectronic substrates.

IT 3115-68-2 28166-41-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (anti-reflective coatings using vinyl ether crosslinkers)

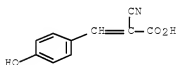
RN 3115-68-2 CAPLUS

CN Phosphonium, tetrabutyl-, bromide (1:1) (CA INDEX NAME)



RN 28166-41-8 CAPLUS

CN 2-Propenoic acid, 2-cyano-3-(4-hydroxyphenyl)- (CA INDEX NAME)



IT 7723-14-0, Phosphorus, uses 17351-75-6  
 75482-18-7  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (anti-reflective coatings using vinyl ether crosslinkers)

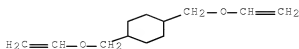
RN 7723-14-0 CAPLUS

CN Phosphorus (CA INDEX NAME)

P

RN 17351-75-6 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



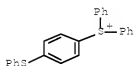
RN 75482-18-7 CAPLUS

CN Sulfonium, diphenyl[4-(phenylthio)phenyl]-, hexafluorophosphate(1-) (1:1)  
(CA INDEX NAME)

CM 1

CRN 47480-44-4

CMF C24 H19 S2



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



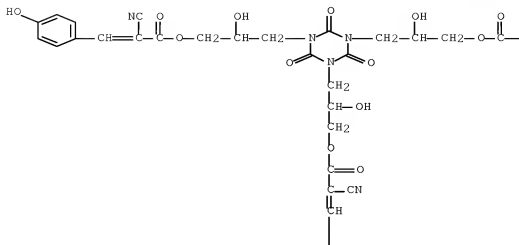
IT 948994-02-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(chromophore; anti-reflective coatings using vinyl ether crosslinkers)

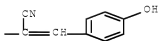
RN 948994-02-3 CAPLUS

CN 2-Propenoic acid, 2-cyano-3-(4-hydroxyphenyl)-,  
1,1',1''-[ (2,4,6-trioxo-1,3,5-triazine-1,3,5 (2H,4H,6H)-triyl)tris(2-hydroxy-3,1-propanediyl)] ester (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



PAGE 2-A



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

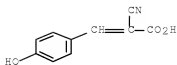
L35 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:993388 CAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 147:353247  
 TITLE: Anti-reflective coatings using vinyl ether crosslinkers  
 INVENTOR(S): Guerrero, Douglas J.; Mercado, Ramil-Marcelo L.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 14pp., Cont.-in-part of U.S. Ser. No. 105,862.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070207406	A1	20070906	US 2007-683309	20070307
US 20050255410	A1	20051117	US 2005-105862	20050414
WO 2008109198	A1	20080912	WO 2008-US51948	20080124
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRIORITY APPLN. INFO.:			US 2004-566329P	P 20040429
			US 2005-105862	A2 20050414
			US 2007-683309	A 20070307
AB	Novel, developer soluble anti-reflective coating compns. and methods of using those compns. are provided. The compns. comprise a polymer and/or oligomer having acid functional groups and dissolved in a solvent system along with a cross linker, a photoacid generator, and optionally a chromophore. The preferred acid functional group is a carboxylic acid, while the preferred crosslinker is a vinyl ether crosslinker. In use, the compns. are applied to a substrate and thermally crosslinked. Upon exposure to light (and optionally a post exposure bake), the cured compns. will decrosslink, rendering them soluble in typical photoresist developing solns. (e.g., alkaline developers). In one embodiment, the compns. can be used to form ion implant areas in microelectronic substrates.			
IT	3115-68-2, Tetrabutylphosphonium bromide 28166-41-8, $\alpha$ -Cyano-4-hydroxycinnamic acid RL: RCT (Reactant); RACT (Reactant or reagent) (anti-reflective coatings using vinyl ether crosslinkers)			
RN	3115-68-2 CAPLUS			
CN	Phosphonium, tetrabutyl-, bromide (1:1) (CA INDEX NAME)			



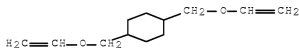
RN 28166-41-8 CAPLUS  
CN 2-Propenoic acid, 2-cyano-3-(4-hydroxyphenyl)- (CA INDEX NAME)



IT 7723-14-0, Phosphorus, uses 17351-75-6, 1,4-Cyclohexane  
dimethanol divinyl ether 75482-18-7, DIS 102  
RL: TEM (Technical or engineered material use); USES (Uses)  
(anti-reflective coatings using vinyl ether crosslinkers)  
RN 7723-14-0 CAPLUS  
CN Phosphorus (CA INDEX NAME)

P

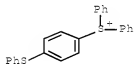
RN 17351-75-6 CAPLUS  
CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



RN 75482-18-7 CAPLUS  
CN Sulfonium, diphenyl[4-(phenylthio)phenyl]-, hexafluorophosphate(1-) (1:1)  
(CA INDEX NAME)

CM 1

CRN 47480-44-4  
CMF C24 H19 S2



CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS



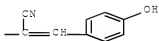
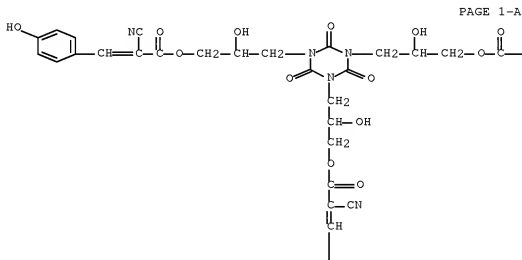
IT 948994-02-3F

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(chromophore; anti-reflective coatings using vinyl ether crosslinkers)

RN 948994-02-3 CAPLUS

CN 2-Propenoic acid, 2-cyano-3-(4-hydroxyphenyl)-, 1,1',1''-[ (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triy1)tris(2-hydroxy-3,1-propanediyl)] ester (CA INDEX NAME)





L35 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:1242883 CAPLUS Full-text  
 DOCUMENT NUMBER: 143:478398  
 TITLE: Polyisobutylene compositions and cured polyisobutylene articles therewith  
 INVENTOR(S): Bahadur, Maneesh; Lo, Peter Yin; Vaughn, Patrick  
 PATENT ASSIGNEE(S): Dow Corning Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 10 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

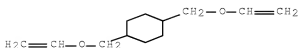
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050261441	A1	20051124	US 2005-80291	20050315
PRIORITY APPLN. INFO.:			US 2004-573422P	P 20040521

AB A polyisobutylene composition, comprising (A) a polyisobutylene polymer selected from (i) a glycidoxo-functional polyisobutylene polymer containing an average of at least two glycidoxo groups per mol. having the formula  $\text{OCH}_2\text{CH}(\text{O})\text{CH}_2$  and (ii) an alkenyl ether-functional polyisobutylene polymer containing an average of at least two alkenyl ether groups per mol. having the formula  $\text{SiR}_1\text{a}[\text{OR}_2\text{OC}(\text{R}_3)\text{CH}(\text{R}_3)]_3\text{-a}$ , wherein each  $\text{R}_1 = \text{C}_1\text{-10 hydrocarbyl}$ ,  $\text{C}_1\text{-10 halogen-substituted hydrocarbyl}$ , or  $\text{C}_1\text{-8 alkoxy}$ ,  $\text{R}_2 = \text{C}_1\text{-10 hydrocarbylene}$  or  $\text{C}_1\text{-10 halogen-substituted hydrocarbylene}$ , each  $\text{R}_3 = \text{C}_1\text{-10 hydrocarbyl}$ ,  $\text{C}_1\text{-10 halogen-substituted hydrocarbyl}$ , or  $\text{H}$ ,  $\text{a} = 0, 1, \text{ or } 2$ , and at least 50 mol % of the repeat units in the polyisobutylene polymer are isobutylene units having the formula:  $\text{CH}_2\text{C}(\text{CH}_3)_2$ ; (B) an epoxy-functional organosiloxane containing 0.5-20% silicon, an average of at least two siloxane linkages per mol., and an average of at least two epoxy groups per mol.; and (C) a catalytic amount of a cationic photoinitiator. And a cured polyisobutylene product prepared by curing the polyisobutylene composition

IT 17351-75-6P, 1,4-Cyclohexanedimethanol divinyl ether  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (crosslinked; polyisobutylene compns. and cured polyisobutylene articles therewith)

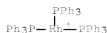
RN 17351-75-6 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyl)oxy]methyl- (CA INDEX NAME)

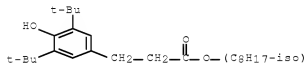




IT 47897-43-8  
 RL: CAT (Catalyst use); USES (Uses)  
 (polyisobutylene compns. and cured polyisobutylene articles therewith)  
 RN 47897-43-8 CAPLUS  
 CN Rhodium(1+), tris(triphenylphosphine)- (CA INDEX NAME)



IT 146598-26-7, Irganox 1135  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (polyisobutylene compns. and cured polyisobutylene articles therewith)  
 RN 146598-26-7 CAPLUS  
 CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, isooctyl ester (CA INDEX NAME)

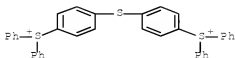


L35 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2009 ACS ON STN  
 ACCESSION NUMBER: 2004:613811 CAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 141:278268  
 TITLE: Investigation of the tensile properties of "epoxy resin-monomer" systems using cationic UV-crosslinkable blends  
 AUTHOR(S): Czech, Zbigniew; Urbala, Magdalena; Martysz, Dagmara  
 CORPORATE SOURCE: Polymer Institute, Technical University of Szczecin, Szczecin, 70-322, Pol.  
 SOURCE: Polymers for Advanced Technologies (2004), 15(7), 387-392  
 CODEN: PADTE5; ISSN: 1042-7147  
 PUBLISHER: John Wiley & Sons Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The compatibility of cycloaliph. and aromatic multifunctional epoxides with several epoxide resins allows the development of a wide range of cationic radiation-curable formulations. The influence of different "epoxide resin-monomer" systems UV-cured in the presence of suitable cationic photoinitiators on the resulting mech. film properties was studied, and the results are stated.  
 IT 74227-35-3, Degacure KI 85  
 RL: CAT (Catalyst use); USES (Uses)  
 (tensile properties of cationic photocrosslinked epoxy resin-monomer systems)  
 RN 74227-35-3 CAPLUS  
 CN Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, hexafluorophosphate(1-)(1:2) (CA INDEX NAME)

CM 1

CRN 74227-34-2

CMF C36 H28 S3



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



IT 760962-60-5P, DEN-439-Rutapox 0161 copolymer 760962-62-7P  
 760962-63-8P 760962-67-2P 760962-68-3P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (tensile properties of cationic photocrosslinked epoxy resin-monomer  
 systems)  
 RN 760962-60-5 CAPLUS  
 CN Phenol, 4,4'-methylenebis-, polymer with (chloromethyl)oxirane and DEN 439  
 (9CI) (CA INDEX NAME)

CM 1

CRN 63957-65-3

CMF Unspecified

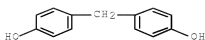
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 620-92-8

CMF C13 H12 O2



CM 3

CRN 106-89-8

CMF C3 H5 Cl O



RN 760962-62-7 CAPLUS

CN Phenol, 4,4'-methylenebis-, polymer with (chloromethyl)oxirane and Quatrex  
1410 (9CI) (CA INDEX NAME)

CM 1

CRN 127121-18-0

CMF Unspecified

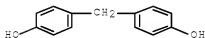
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 620-92-8

CMF C13 H12 O2



CM 3

CRN 106-89-8

CMF C3 H5 Cl O



RN 760962-63-8 CAPLUS  
 CN Phenol, 4,4'-methylenebis-, polymer with (chloromethyl)oxirane, Quatrex  
 1410 and 3,6,9,12-tetraoxatetradeca-1,13-diene (9CI) (CA INDEX NAME)

CM 1

CRN 127121-18-0  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

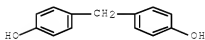
CM 2

CRN 765-12-8  
 CMF C10 H18 O4



CM 3

CRN 620-92-8  
 CMF C13 H12 O2



CM 4

CRN 106-89-8  
 CMF C3 H5 Cl O



RN 760962-67-2 CAPLUS  
 CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]-, polymer with Quatrex 1410 (9CI)  
 (CA INDEX NAME)

CM 1

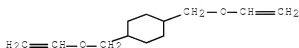
CRN 127121-18-0

CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 17351-75-6  
CMF C12 H20 O2



RN 760962-68-3 CAPLUS  
CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]-, polymer with DEN 439 (9CI) (CA INDEX NAME)

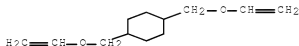
CM 1

CRN 63957-65-3  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 17351-75-6  
CMF C12 H20 O2



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2004:217233 CAPLUS [Full-text](#)  
DOCUMENT NUMBER: 140:254601  
TITLE: Cellulose acylate films with good optical properties, low haze, and high tear strength and polarizing plates using them  
INVENTOR(S): Kato, Eiichi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004083657	A	20040318	JP 2002-243596	20020823
PRIORITY APPLN. INFO.:			JP 2002-243596	20020823

AB The films, showing thickness 10-30  $\mu\text{m}$ , are manufactured by casting cellulose acylate dopes containing (functional group-containing) monomers and photopolymn. initiators and photopolymg. the monomers before or after drying. Thus, a film was manufactured from a dope containing cellulose triacetate, plasticizers, SiO<sub>2</sub> microparticles, vinyl acetate, octadecyl methacrylate, benzotriazole-containing methacrylate, and photopolymn. initiator. The film showed haze before and after storage (90%, 80% humidity, 500 h) 0.4 and 0.4%, resp., tear strength before and after the storage 520 and 505 g, resp., and no contamination. A durable polarizing plate was manufactured using the film.

IT 658059-85-9P 671773-87-8P 671773-89-0P  
671773-93-6P  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cellulose acylate films containing photopolymd. monomers for polarizing plates)

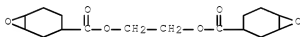
RN 658059-85-9 CAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 1,1'-(1,2-ethanediyl) ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane (CA INDEX NAME)

CM 1

CRN 72046-03-8

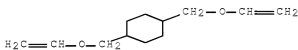
CMF C16 H22 O6



CM 2

CRN 17351-75-6

CMF C12 H20 O2

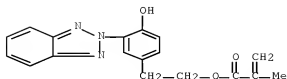


RN 671773-87-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with ethenyl acetate and octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

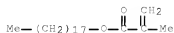
CM 1

CRN 96478-09-0  
CMF C18 H17 N3 O3



CM 2

CRN 32360-05-7  
CMF C22 H42 O2



CM 3

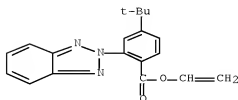
CRN 108-05-4  
CMF C4 H6 O2



RN 671773-89-0 CAPLUS  
CN Benzenemethanaminium, 4-ethenyl-N-hexyl-N,N-dimethyl-, hexafluorophosphate(1-), polymer with ethenyl acetate and ethenyl 2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)benzoate (9CI) (CA INDEX NAME)

CM 1

CRN 671773-88-9  
CMF C19 H19 N3 O2



CM 2

CRN 108-05-4

CMF C4 H6 O2



CM 3

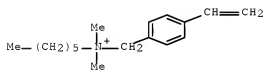
CRN 669060-46-2

CMF C17 H28 N . F6 P

CM 4

CRN 669060-45-1

CMF C17 H28 N



CM 5

CRN 16919-18-9

CMF F6 P

CCI CCS



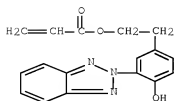
RN 671773-93-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 4-benzoylphenyl ester, polymer with  
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate and propyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

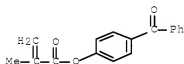


CRN 170103-27-2  
CMF C17 H15 N3 O3



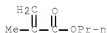
CM 2

CRN 56467-43-7  
CMF C17 H14 O3



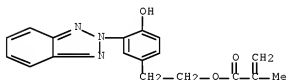
CM 3

CRN 2210-28-8  
CMF C7 H12 O2



L35 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:200266 CAPLUS Full-text  
 DOCUMENT NUMBER: 140:261158  
 TITLE: Defect-free cellulose acylate films with high tear strength, their manufacture, and polarizer plates therewith  
 INVENTOR(S): Kato, Eiichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

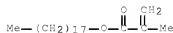
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2004074633	A	20040311	JP 2002-239487	20020820
PRIORITY APPLN. INFO.:				JP 2002-239487	20020820
AB	Cellulose acylate dopes containing (functional group-containing) monomers and photopolymerization initiators are extruded onto drums and exposed at dope layer temperature 25-40° to give films with min. retardation, high rigidity, and excellent transparency.				
IT	272116-58-2P 658059-85-9P 669060-48-4P 669060-50-3P 669063-45-0P				
	RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				
	(manufacture of defect-free cellulose acylate films with high tear strength for LCD polarizers)				
RN	272116-58-2 CAPLUS				
CN	2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with octadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)				
CM	1				
CRN	96478-09-0				
CMF	C18 H17 N3 O3				



CM 2

CRN 32360-05-7

CMF C22 H42 O2



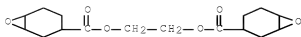
RN 658059-85-9 CAPLUS

CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 1,1'-(1,2-ethanediyl) ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane (CA INDEX NAME)

CM 1

CRN 72046-03-8

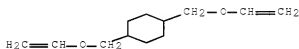
CMF C16 H22 O6



CM 2

CRN 17351-75-6

CMF C12 H20 O2



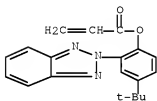
RN 669060-48-4 CAPLUS

CN Benzenemethanaminium, 4-ethenyl-N-hexyl-N,N-dimethyl-,  
hexafluorophosphate(1-), polymer with  
2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)phenyl 2-propenoate and  
ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 669060-47-3

CMF C19 H19 N3 O2



CM 2

CRN 108-05-4

CMF C4 H6 O2

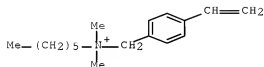


CM 3

CRN 669060-46-2  
 CMF C17 H28 N . F6 P

CM 4

CRN 669060-45-1  
 CMF C17 H28 N



CM 5

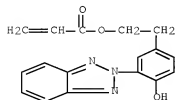
CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



RN 669060-50-8 CAPLUS  
 CN Hexanedioic acid, bis(7-oxabicyclo[4.1.0]hept-3-ylmethyl) ester, polymer  
 with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate (9CI)  
 (CA INDEX NAME)

CM 1

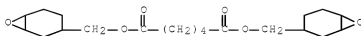
CRN 170103-27-2  
 CMF C17 H15 N3 O3



CM 2

CRN 3130-19-6

CMF C20 H30 O6



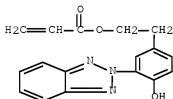
RN 669063-45-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, propyl ester, polymer with  
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate and  
 4-benzoylphenyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

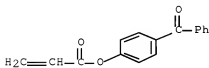
CMF C17 H15 N3 O3



CM 2

CRN 22535-49-5

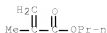
CMF C16 H12 O3



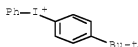
CM 3

CRN 2210-28-8

CMF C7 H12 O2



IT 184591-55-7  
 RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES  
 (Uses)  
 (photopolymn. catalysts; manufacture of defect-free cellulose acylate films  
 with high tear strength for LCD polarizers)  
 RN 184591-55-7 CAPLUS  
 CN Iodonium, [4-(1,1-dimethylethyl)phenyl]phenyl-, hexafluorophosphate(1-)  
 (1:1) (CA INDEX NAME)  
 CM 1  
 CRN 94590-80-4  
 CMF C16 H18 I



CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L35 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:180035 CAPLUS Full-text  
 DOCUMENT NUMBER: 140:243664  
 TITLE: Cellulose acylate films with excellent transparency,  
 tear strength, and weather resistance, their  
 manufacture, and optical films, liquid crystal  
 displays, and silver halide photographic materials  
 using them  
 INVENTOR(S): Kato, Eiichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004067816	A	20040304	JP 2002-227579	20020805

PRIORITY APPLN. INFO.:  
 JP 2002-227579 20020805

AB The films are manufactured by casting cellulose acylate compns. containing polymerizable monomers, photothermal converting agents, and thermal polymerization initiators and irradiating them with IR.

IT 151543-64-5P, Poly(1,4-cyclohexanedimethanol divinyl ether)  
 658059-89-3P 658059-91-7P 658059-97-3P  
 658060-03-3P 658060-09-4P 658060-36-7P  
 658060-38-9DP, polymers 666837-41-8P  
 666837-57-6DP, reaction products with epoxy resin  
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (manufacture of cellulose acylate cast films with good transparency, tear strength, and weather resistance for optical use)

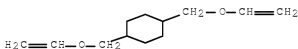
RN 151543-64-5 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyl)oxy]methyl-, homopolymer (CA INDEX NAME)

CM 1

CRN 17351-75-6

CMF C12 H20 O2



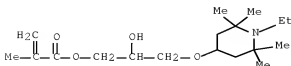
RN 658059-89-3 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with cyclooctylmethyl 2-propenoate, 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and 2-[[3-hydroxy-2,2-bis[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-88-2

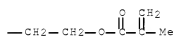
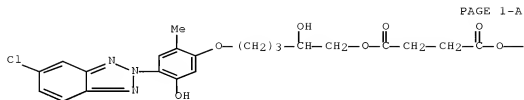
CMF C18 H33 N O4



CM 2

CRN 658059-87-1

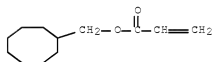
CMF C28 H32 Cl N3 O9



CM 3

CRN 654072-00-1

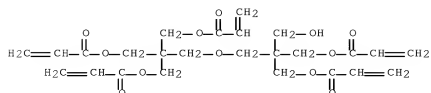
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12

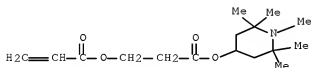




RN 658059-91-7 CAPLUS  
 CN 2-Propenoic acid, 2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, cyclooctylmethyl 2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyloxy)propyl 2-propenoate (9CI) (CA INDEX NAME)

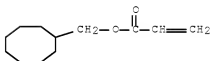
CM 1

CRN 658059-90-6  
 CMF C16 H27 N O4



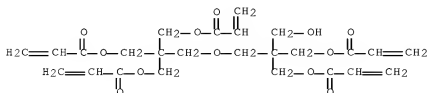
CM 2

CRN 654072-00-1  
 CMF C12 H20 O2



CM 3

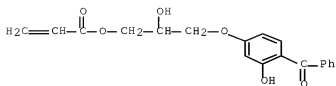
CRN 60506-81-2  
 CMF C25 H32 O12



CM 4

CRN 1843-07-8

CMF C19 H18 O6



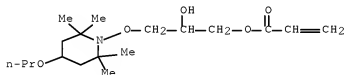
RN 658059-97-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[2-[3-(1,1-dimethylethyl)-2-hydroxy-5-methylphenyl]-7-hydroxy-2H-benzotriazol-5-yl]ethyl ester, polymer with cyclooctylmethyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[1-(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-hydroxy-3-[(2,2,6,6-tetramethyl-4-propoxy-1-piperidinyl)oxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-96-2

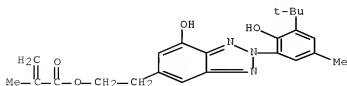
CMF C18 H33 N O5



CM 2

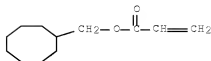
CRN 658059-95-1

CMF C23 H27 N3 O4



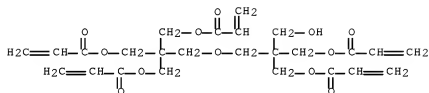
CM 3

CRN 654072-00-1  
CMF C12 H20 O2



CM 4

CRN 60506-81-2  
CMF C25 H32 O12

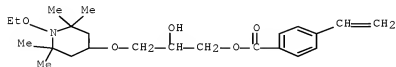


RN 658060-03-8 CAPLUS

CN Benzoic acid, 4-ethenyl-, 3-[(1-ethoxy-2,2,6,6-tetramethyl-4-piperidinyloxy]-2-hydroxypropyl ester, polymer with cyclooctylmethyl 2-propenoate, 2-(1,1-dimethylethyl)-4-[3-[(4-ethenylphenyl)methoxy]-2-hydroxypropoxy]-6-(5-methoxy-2H-benzotriazol-2-yl)phenol and 2-[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

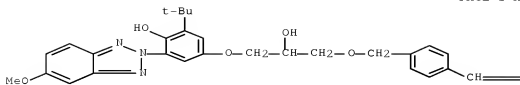
CRN 658060-02-7  
CMF C23 H35 N O5



CM 2

CRN 658060-01-6  
CMF C29 H33 N3 O5

PAGE 1-A



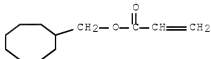
PAGE 1-B



CM 3

CRN 654072-00-1

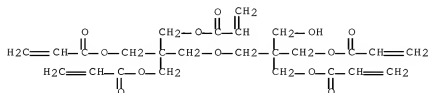
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12



RN 658060-09-4 CAPLUS

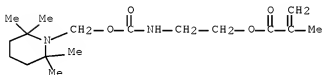
CN 2-Propenoic acid, 2-methyl-, 2-[[[(2,2,6,6-tetramethyl-1-piperidiny)methoxy]carbonyl]amino]ethyl ester, polymer with

3-[4-[4,6-bis(4-methylphenyl)-1,3,5-triazin-2-yl]-3-hydroxyphenoxy]-3-oxopropyl 2-propenoate, cyclooctylmethyl 2-propenoate and 2-[[[3-hydroxy-2,2-bis[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[1-oxo-2-propenyl]oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-08-3

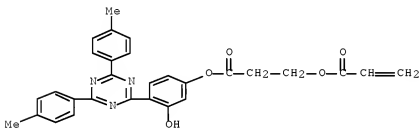
CMF C17 H30 N2 O4



CM 2

CRN 658060-07-2

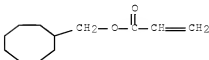
CMF C29 H25 N3 O5



CM 3

CRN 654072-00-1

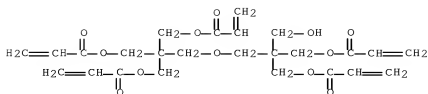
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12



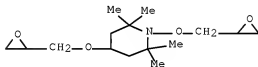
RN 658060-36-7 CAPLUS

CN 2H-Benzotriazole-5-propanoic acid, 2-[2-hydroxy-3-(1-methylethyl)phenyl]-, 2-(ethenyloxy)ethyl ester, polymer with 2,2'-[(1-methylethylidene)bis(4,1-cyclohexanediylloxymethylene)]bis[oxirane], 2,2,6,6-tetramethyl-1,4-bis(oxiranylmethoxy)piperidine and 1,3,5-tris[2-(ethenyloxy)ethoxy]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 658060-35-6

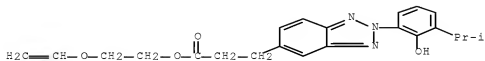
CMF C15 H27 N O4



CM 2

CRN 658060-34-5

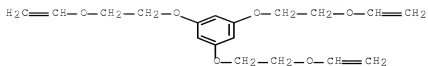
CMF C22 H25 N3 O4



CM 3

CRN 142248-13-3

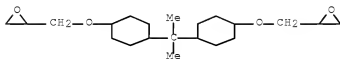
CMF C18 H24 O6



CM 4

CRN 13410-58-7

CMF C21 H36 O4



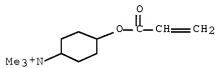
RN 658060-38-9 CAPLUS

CN Cyclohexanaminium, N,N,N-trimethyl-4-[(1-oxo-2-propen-1-yl)oxy]-, hexafluorophosphate (1-) (1:1) (CA INDEX NAME)

CM 1

CRN 658060-37-8

CMF C12 H22 N O2



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

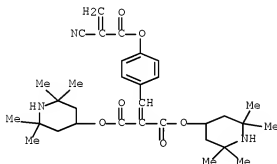


RN 666837-41-8 CAPLUS  
 CN Propanedioic acid, [[4-[(2-cyano-1-oxo-2-propenyl)oxy]phenyl]methylene]-, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester, polymer with cyclooctylmethyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 3-[4-hydroxy-3-(5-methyl-2H-benzotriazol-2-yl)phenyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 666837-40-7

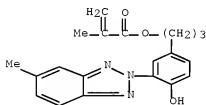
CMF C32 H43 N3 O6



CM 2

CRN 658059-92-8

CMF C20 H21 N3 O3

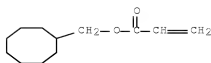


CM 3

CRN 654072-00-1

CMF C12 H20 O2

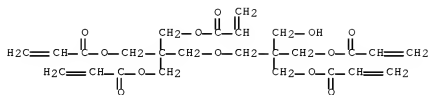




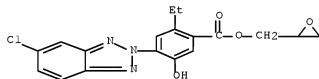
CM 4

CRN 60506-81-2

CMF C25 H32 O12



RN 666837-57-6 CAPLUS

CN Benzoic acid, 4-(5-chloro-2H-benzotriazol-2-yl)-2-ethyl-5-hydroxy-,  
2-oxiranymethyl ester (CA INDEX NAME)

IT 191043-97-7

RL: CAT (Catalyst use); USES (Uses)

(photopolymn. initiator; manufacture of cellulose acylate cast films with  
good transparency, tear strength, and weather resistance for optical  
use)

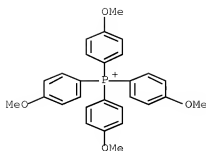
RN 191043-97-7 CAPLUS

CN Phosphonium, tetrakis(4-methoxyphenyl)-, tetrafluoroborate(1-) (1:1) (CA  
INDEX NAME)

CM 1

CRN 47718-95-6

CMF C28 H28 O4 P



CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



IT 666837-30-5 666837-34-9

RL: CAT (Catalyst use); USES (Uses)

(photothermal converter; manufacture of cellulose acylate cast films with good transparency, tear strength, and weather resistance for optical use)

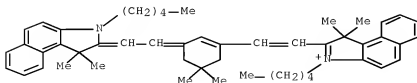
RN 666837-30-5 CAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[2-(1,3-dihydro-1,1-dimethyl-3-pentyl-2H-benz[e]indol-2-ylidene)ethylidene]-5,5-dimethyl-1-cyclohexen-1-yl]ethenyl]-1,1-dimethyl-3-pentyl-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 666837-29-2

CMF C50 H61 N2



CM 2

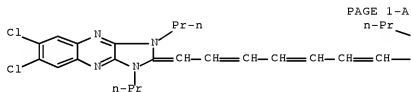
CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



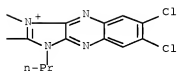
RN 666837-34-9 CAPLUS  
 CN 1H-Imidazo[4,5-b]quinoxalinium, 6,7-dichloro-2-[7-(6,7-dichloro-1,3-dihydro-1,3-dipropyl-2H-imidazo[4,5-b]quinoxalin-2-ylidene)-1,3,5-heptatrien-1-yl]-1,3-dipropyl-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 666837-33-8  
 CMF C37 H39 C14 N8



PAGE 1-A  
 n-Pr



PAGE 1-B

CM 2

CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L35 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:117562 CAPLUS Full-text  
 DOCUMENT NUMBER: 140:189907  
 TITLE: Cellulose acylate films, their manufacture, optical films, liquid-crystal displays, and silver halide photographic materials  
 INVENTOR(S): Kato, Eiichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004042381	A	20040212	JP 2002-201749	20020710
PRIORITY APPLN. INFO.:			JP 2002-201749	20020710
OTHER SOURCE(S):	MARPAT 140:189907			

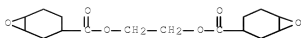
AB The films are manufactured by (1) applying cellulose acylate compns. containing polymerizable monomers, photopolymn. initiators, and spectral sensitizers Ar1R3C:CR2C(:X)R1 [R1-R3 = H, monovalent nonmetal atomic group; R1-R3 may form acidic nucleus of dyes; Ar1 = aryl group having OR4, NR5, and/or SR6 at o- or p-position; X = O, S, :NR7; R4-R7 = (un)substituted alkyl or aryl] and (2) irradiating with UV light. The photog. materials have supports of the films with thickness 30-250  $\mu$ m. The films show high bending and tear strength and good storage stability.

IT 658059-85-9P 658059-89-3P 658059-91-7P  
 658059-94-0P 658059-97-3P 658060-03-8P  
 658060-09-4P 658060-11-8P 658060-13-0P  
 658060-14-1P 658060-16-3P 658060-18-5P  
 658060-20-9P 658060-21-0P 658060-23-2P  
 658060-24-3P 658060-26-5P 658060-30-1P  
 658060-36-7P 658060-40-3P 658060-43-6P  
 658063-12-8P 658063-14-0P  
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (manufacture of cellulose acylate films with high tear strength for LCD and photog. materials)

RN 658059-85-9 CAPLUS  
 CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 1,1'-(1,2-ethanediy) ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane (CA INDEX NAME)

CM 1

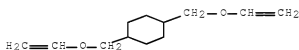
CRN 72046-03-8  
 CMF C16 H22 O6



CM 2

CRN 17351-75-6

CMF C12 H20 O2



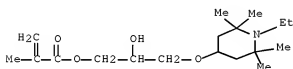
RN 658059-89-3 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with cyclooctylmethyl 2-propenoate, 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and 2-[[3-hydroxy-2,2-bis[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-88-2

CMF C18 H33 N O4

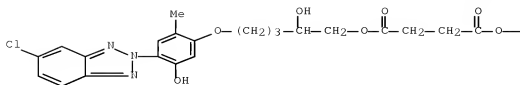


CM 2

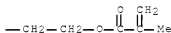
CRN 658059-87-1

CMF C28 H32 Cl N3 O9

PAGE 1-A



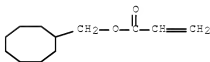
PAGE 1-B



CM 3

CRN 654072-00-1

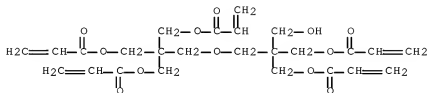
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12



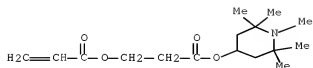
RN 658059-91-7 CAPLUS

CN 2-Propenoic acid, 2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, cyclooctylmethyl 2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-90-6

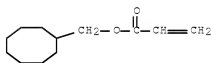
CMF C16 H27 N O4



CM 2

CRN 654072-00-1

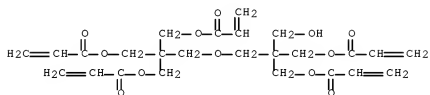
CMF C12 H20 O2



CM 3

CRN 60506-81-2

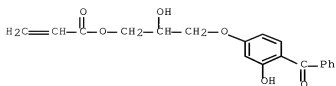
CMF C25 H32 O12



CM 4

CRN 1843-07-8

CMF C19 H18 O6



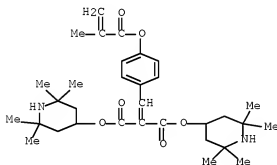
RN 658059-94-0 CAPLUS

CN Propanedioic acid, [[4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]methylene]-, bis(2,2,6,6-tetramethyl-4-piperidinyl) ester, polymer with cyclooctylmethyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 3-[4-hydroxy-3-(5-methyl-2H-benzotriazol-2-yl)phenyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-93-9

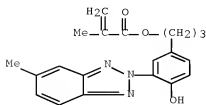
CMF C32 H46 N2 O6



CM 2

CRN 658059-92-8

CMF C20 H21 N3 O3

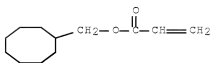




CM 3

CRN 654072-00-1

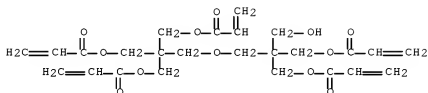
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12



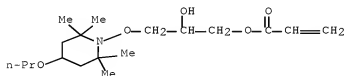
RN 658059-97-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[2-[3-(1,1-dimethylethyl)-2-hydroxy-5-methylphenyl]-7-hydroxy-2H-benzotriazol-5-yl]ethyl ester, polymer with cyclooctylmethyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-hydroxy-3-[(2,2,6,6-tetramethyl-4-propoxy-1-piperidinyl)oxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-96-2

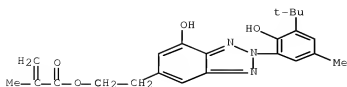
CMF C18 H33 N O5



CM 2

CRN 658059-95-1

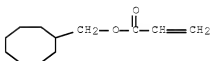
CMF C23 H27 N3 O4



CM 3

CRN 654072-00-1

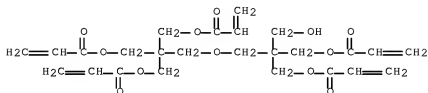
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12



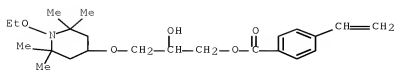
RN 658060-03-8 CAPLUS

CN Benzoic acid, 4-ethenyl-, 3-[(1-ethoxy-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl ester, polymer with cyclooctylmethyl 2-propenoate, 2-(1,1-dimethylethyl)-4-[3-[(4-ethenylphenyl)methoxy]-2-hydroxypropoxy]-6-(5-methoxy-2H-benzotriazol-2-yl)phenol and 2-[[3-hydroxy-2,2-bis[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-02-7

CMF C23 H35 N O5

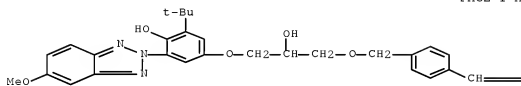


CM 2

CRN 658060-01-6

CMF C29 H33 N3 O5

PAGE 1-A



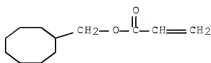
PAGE 1-B

=CH<sub>2</sub>

CM 3

CRN 654072-00-1

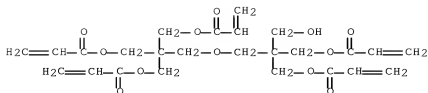
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12



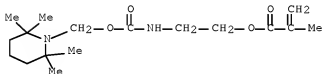
RN 658060-09-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[(2,2,6,6-tetramethyl-1-piperidinyl)methoxy]carbonyl]amino]ethyl ester, polymer with 3-[4-[4,6-bis(4-methylphenyl)-1,3,5-triazin-2-yl]-3-hydroxyphenoxy]-3-oxopropyl 2-propenoate, cyclooctylmethyl 2-propenoate and 2-[[3-hydroxy-2,2-bis[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[1-oxo-2-propenyl]oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-08-3

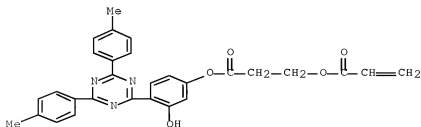
CMF C17 H30 N2 O4



CM 2

CRN 658060-07-2

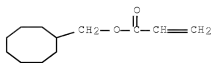
CMF C29 H25 N3 O5



CM 3

CRN 654072-00-1

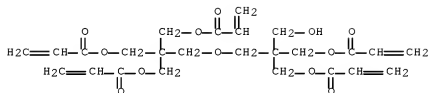
CMF C12 H20 O2



CM 4

CRN 60506-81-2

CMF C25 H32 O12



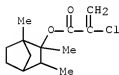
RN 658060-11-8 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and 1,2,3-trimethylbicyclo[2.2.1]hept-2-yl 2-chloro-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-10-7

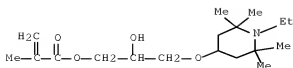
CMF C13 H19 Cl O2



CM 2

CRN 658059-88-2

CMF C18 H33 N O4

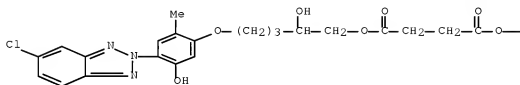


CM 3

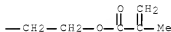
CRN 658059-87-1

CMF C28 H32 Cl N3 O9

PAGE 1-A



PAGE 1-B



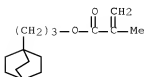
RN 658060-13-0 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 3-bicyclo[2.2.2]oct-1-ylpropyl 2-methyl-2-propenoate, 2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-12-9

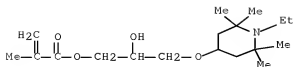
CMF C15 H24 O2



CM 2

CRN 658059-88-2

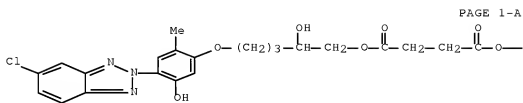
CMF C18 H33 N O4



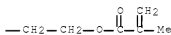
CM 3

CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A

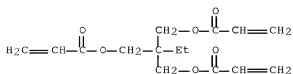


PAGE 1-B

CM 4

CRN 15625-89-5

CMF C15 H20 O6



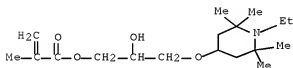
RN 658060-14-1 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethenyl cyclohexaneacetate, ethenyl 2-methyl-2-propenoate and 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyloxy]-2-hydroxypropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-88-2

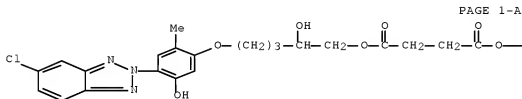
CMF C18 H33 N O4



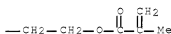
CM 2

CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A



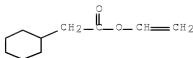
PAGE 1-B

CM 3

CRN 46116-96-5

CMF C10 H16 O2





CM 4

CRN 4245-37-8

CMF C6 H8 O2



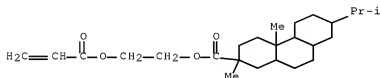
RN 658060-16-3 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and 2-[(1-oxo-2-propenyl)oxy]ethyl tetradecahydro-2,4a-dimethyl-7-(1-methylethyl)-2-phenanthrenecarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-15-2

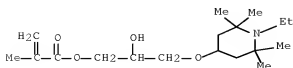
CMF C25 H40 O4



CM 2

CRN 658059-88-2

CMF C18 H33 N O4

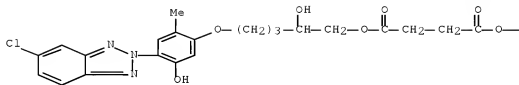


CM 3

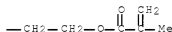
CRN 658059-87-1

CMF C28 H32 Cl N3 O9

PAGE 1-A



PAGE 1-B



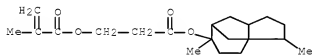
RN 658060-18-5 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 3-[(1-ethyl-2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and 3-[(octahydro-3,6-dimethyl-1H-3a,7-methanoazulen-6-yl)oxy]-3-oxopropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-17-4

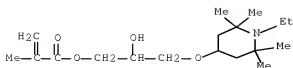
CMF C20 H30 O4



CM 2

CRN 658059-88-2

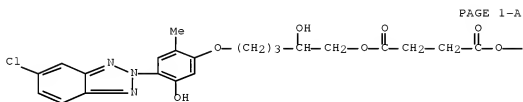
CMF C18 H33 N O4



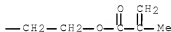
CM 3

CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A



PAGE 1-B

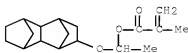
RN 658060-20-9 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 1-[(decahydro-1,4:5,8-dimethanonaphthalen-2-yl)oxy]ethyl 2-methyl-2-propenoate and 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

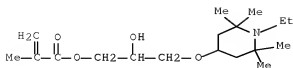
CRN 658060-19-6

CMF C18 H26 O3



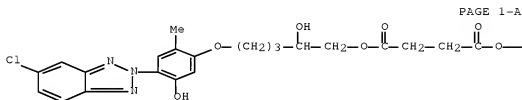
CM 2

CRN 658059-88-2  
 CMF C18 H33 N O4

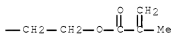


CM 3

CRN 658059-87-1  
 CMF C28 H32 Cl N3 O9



PAGE 1-A

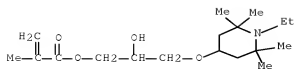


PAGE 1-B

RN 658060-21-0 CAPLUS  
 CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with ethenylbenzene, (ethenyl)oxy)cyclohexane and 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyloxy]-2-hydroxypropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

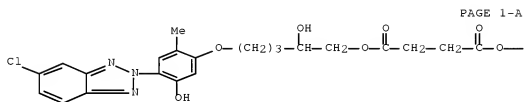
CRN 658059-88-2  
 CMF C18 H33 N O4



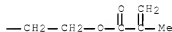
CM 2

CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A

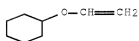


PAGE 1-B

CM 3

CRN 2182-55-0

CMF C8 H14 O



CM 4

CRN 100-42-5

CMF C8 H8

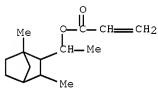


RN 658060-23-2 CAPLUS  
 CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 1-(1,3-dimethylbicyclo[2.2.1]hept-2-yl)ethyl 2-propenoate and 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyloxy]-2-hydroxypropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658060-22-1

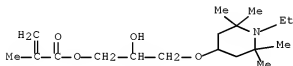
CMF C14 H22 O2



CM 2

CRN 658059-88-2

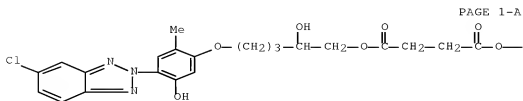
CMF C18 H33 N O4



CM 3

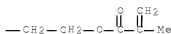
CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A

PAGE 1-B



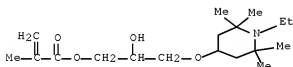
RN 658060-24-3 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[ (2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-cyclohexylethyl 2-methyl-2-propenoate, 3-[ (1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-88-2

CMF C18 H33 N O4

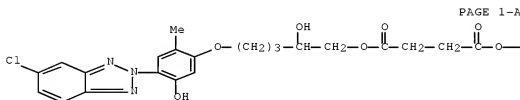


CM 2

CRN 658059-87-1

CMF C28 H32 Cl N3 O9

PAGE 1-A

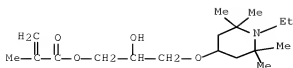


PAGE 1-B





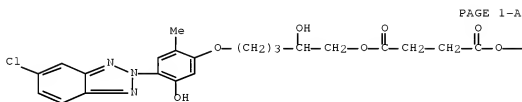




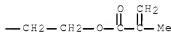
CM 3

CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A

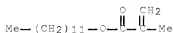


PAGE 1-B

CM 4

CRN 142-90-5

CMF C16 H30 O2



RN 658060-30-1 CAPLUS

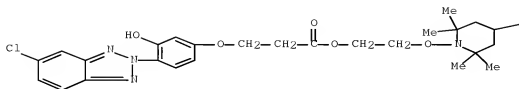
CN 7-Oxabicyclo[4.1.0]heptane-3-acetic acid,  
 5-(7-oxabicyclo[4.1.0]hept-3-ylmethoxy)-5-oxopentyl ester, polymer with  
 3-[[1-[2-[3-[4-(5-chloro-2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-oxopropoxy]ethoxy]-2,2,6,6-tetramethyl-4-piperidinyl]oxy]-2-hydroxypropyl  
 2-methyl-2-propenoate and 2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl  
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

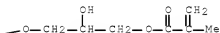
CRN 658060-29-8

CMF C33 H43 Cl N4 O9

PAGE 1-A



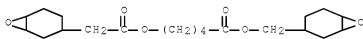
PAGE 1-B



CM 2

CRN 658060-28-7

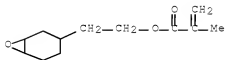
CMF C20 H30 O6



CM 3

CRN 59620-20-1

CMF C12 H18 O3



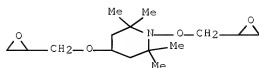
RN 658060-36-7 CAPLUS

CN 2H-Benzotriazole-5-propanoic acid, 2-[2-hydroxy-3-(1-methylethyl)phenyl]-,  
 2-(ethenyloxy)ethyl ester, polymer with  
 2,2'-[(1-methylethylidene)bis(4,1-  
 cyclohexanedioxy)methylene]bis[oxirane],  
 2,2,6,6-tetramethyl-1,4-bis(oxiranylmethoxy)piperidine and  
 1,3,5-tris[2-(ethenyloxy)ethoxy]benzene (9CI) (CA INDEX NAME)

CM 1

CRN 658060-35-6

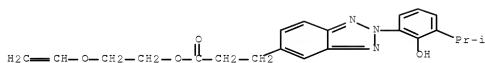
CMF C15 H27 N O4



CM 2

CRN 658060-34-5

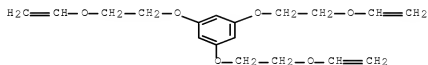
CMF C22 H25 N3 O4



CM 3

CRN 142248-13-3

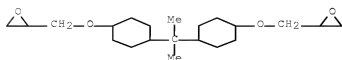
CMF C18 H24 O6



CM 4

CRN 13410-58-7

CMF C21 H36 O4

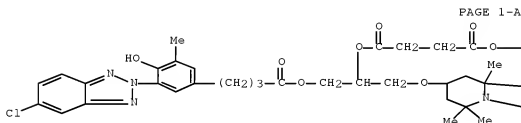


RN 658060-40-3 CAPLUS  
 CN Cyclohexanaminium, N,N,N-trimethyl-4-[(1-oxo-2-propenyl)oxy]-, hexafluorophosphate(1-), polymer with 1-[[4-[3-(5-chloro-2H-benzotriazol-2-yl)-4-hydroxy-5-methylphenyl]-1-oxobutoxy]methyl]-2-[(1,2,2,6,6-pentamethyl-4-piperidinyloxy)ethyl 2-[(1-oxo-2-propenyl)oxy]ethyl butanedioate and phenylmethyl 2-propenoate (9CI) (CA INDEX NAME)

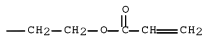
CM 1

CRN 658060-39-0

CMF C39 H51 Cl N4 O10



PAGE 1-B



—Me

—Me

CM 2

CRN 2495-35-4

CMF C10 H10 O2



CM 3

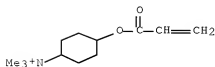
CRN 658060-38-9

CMF C12 H22 N O2 . F6 P

CM 4

CRN 658060-37-8

CMF C12 H22 N O2



CM 5

CRN 16919-18-9

CMF F6 P

CCI CCS



RN 658060-43-6 CAPLUS

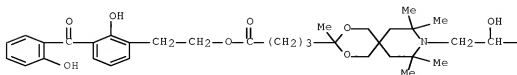
CN Ethanaminium, N,N,N-triethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with cyclohexylmethyl 2-propenoate and 2-[2-hydroxy-3-(2-hydroxybenzoyl)phenyl]ethyl 9-[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl]-3,8,10,10-pentamethyl-2,4-dioxo-9-azaspiro[5.5]undecane-3-butanoate (9CI) (CA INDEX NAME)

CM 1

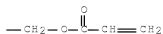
CRN 658060-42-5

CMF C38 H51 N O10

PAGE 1-A



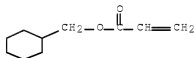
PAGE 1-B



CM 2

CRN 16868-15-8

CMF C10 H16 O2



CM 3

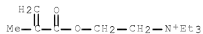
CRN 128611-70-1

CMF C12 H24 N O2 . C7 H7 O3 S

CM 4

CRN 48067-10-3

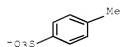
CMF C12 H24 N O2



CM 5

CRN 16722-51-3

CMF C7 H7 O3 S



RN 658063-12-8 CAPLUS

CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[ (2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2,2-bis[[(1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl

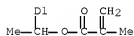
di-2-propenoate, 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and 1-tricyclo[3.3.1.1.3,7]decylethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658063-11-7

CMF C16 H24 O2

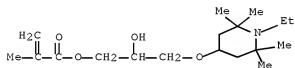
CCI IDS



CM 2

CRN 658059-88-2

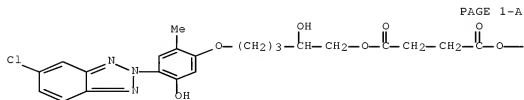
CMF C18 H33 N O4



CM 3

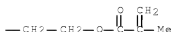
CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A

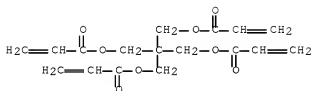
PAGE 1-B



CM 4

CRN 4986-89-4

CMF C17 H20 O8



RN 658063-14-0 CAPLUS

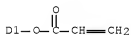
CN Butanedioic acid, 5-[4-(5-chloro-2H-benzotriazol-2-yl)-5-hydroxy-2-methylphenoxy]-2-hydroxypentyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 1-ethoxytricyclo[3.3.1.1<sup>3,7</sup>]decyl 2-propenoate, 3-[(1-ethyl-2,2,6,6-tetramethyl-4-piperidinyl)oxy]-2-hydroxypropyl 2-methyl-2-propenoate and hexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658063-13-9

CMF C15 H22 O3

CCI IDS

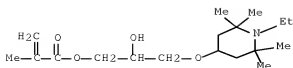


CM 2

CRN 658059-88-2

CMF C18 H33 N O4

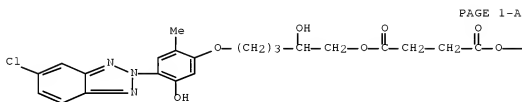




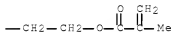
CM 3

CRN 658059-87-1

CMF C28 H32 Cl N3 O9



PAGE 1-A

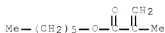


PAGE 1-B

CM 4

CRN 142-09-6

CMF C10 H18 O2



L35 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2003:855869 CAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 139:353387  
 TITLE: Coated multilayer abrasive articles  
 INVENTOR(S): Koehnle, Gregory A.; Woo, Edward J.  
 PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA  
 SOURCE: PCT Int. Appl., 38 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

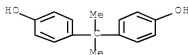
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003089194	A1	20031030	WO 2003-US7395	20030307
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20030200701	A1	20031030	US 2002-125938	20020419
US 6773474	B2	20040810		
AU 2003220160	A1	20031103	AU 2003-220160	20030307
EP 1497079	A1	20050119	EP 2003-716455	20030307
EP 1497079	B1	20080521		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003009072	A	20050222	BR 2003-9072	20030307
JP 2005523169	T	20050804	JP 2003-585934	20030307
AT 396011	T	20080615	AT 2003-716455	20030307
PRIORITY APPLN. INFO.:			US 2002-125938	A 20020419
			WO 2003-US7395	W 20030307
AB	Coated abrasive articles comprise a backing and an abrasive layer, and optionally at least one of a back-size layer, tie layer, super-size layer, pre-size layer, or saturant. The coated abrasive article comprises a reaction product of components comprising: polyfunctional acrylate; polyfunctional cationically polymerizable material; free radical photoinitiator; triarylsulfonium salt having the formula (I), wherein R1, R2 and R3 independently represent an, optionally substituted, aromatic group having from 4 to 20 carbon atoms, and Y- represents a non-interfering anion; and quaternary ammonium salt having the formula (II), wherein X- is a non-interfering anion.			
IT	25068-38-6, Epon 1001F RL: TEM (Technical or engineered material use); USES (Uses) (DER 331, Epon 1001F, coating component; coated multilayer abrasive articles)			
RN	25068-38-6 CAPLUS			
CN	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane (CA INDEX NAME)			
CM	1			
CRN	106-89-8			
CMF	C3 H5 Cl O			



CM 2

CRN 80-05-7

CMF C15 H16 O2



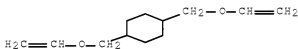
IT 17351-75-6, Rapi-Cure CHVE

RL: MOA (Modifier or additive use); USES (Uses)

(coating component; coated multilayer abrasive articles)

RN 17351-75-6 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



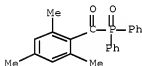
IT 75980-60-8, Lucirin TPO 189146-15-4, Darocur 4265

RL: TEM (Technical or engineered material use); USES (Uses)

(coating component; coated multilayer abrasive articles)

RN 75980-60-8 CAPLUS

CN Methanone, (diphenylphosphinyl)(2,4,6-trimethylphenyl)- (CA INDEX NAME)



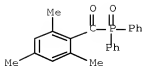
RN 189146-15-4 CAPLUS

CN 1-Propanone, 2-hydroxy-2-methyl-1-phenyl-, mixt. with  
(diphenylphosphinyl)(2,4,6-trimethylphenyl)methanone (CA INDEX NAME)

CM 1

CRN 75980-60-8

CMF C22 H21 O2 P



CM 2

CRN 7473-98-5  
CMF C10 H12 O2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:793688 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 139:277870

TITLE: Thermosetting poly(thio)ether composition and its use as materials for electronic device

INVENTOR(S): Kato, Ikuhiro; Nakata, Isao; Nakazato, Katsumi; Saito, Satoshi

PATENT ASSIGNEE(S): NOF Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003286403	A	20031010	JP 2002-92610	20020328
JP 4110813	B2	20080702		

PRIORITY APPLN. INFO.: JP 2002-92610 20020328

AB The composition contains a poly(thio)ether with mol. weight 500-100,000 involving repeating unit (OR1OCMeHYR2YCMeH) (R1 = divalent phenolic compound residue; R2 = C1-25 divalent organic group; Y = O, S) and a compound substituted with  $\geq 2$  OH-reactive functional groups. Alternatively, the composition contains 5-95 parts of the poly(thio)ether, 5-95 parts of the OH-reactive compound, and 0.01-50 parts of a basic catalyst. The composition, showing enhanced storage stability, is cured to give an electronic device material, e.g., photoresist, color filter, photomask, solder paste, etc. Thus, 25.2 parts catechol and 44.8 parts cyclohexanedimethanol divinyl ether were polymerized in Me iso-Bu ketone in the presence of a phosphate catalyst (AP-8) to give a polyether, 42.2 parts of which was mixed with 57.8 parts epoxy resin (Epikote 157) and 1.0 part 2-undecylimidazole (Curezol C 11Z) to give the

composition Then, the composition was applied on an Al plate, prebaked at 80° for 30 min, and postbaked at 180° for 60 min to give a cured coating showing good resistance to H2SO4 and to impact.

IT 824-72-6, Phenylphosphonyl dichloride

RL: RCT (Reactant); RACT (Reactant or reagent)

(thermosetting poly(thio)ether composition containing hydroxy-reactive compound

containing polymerization catalyst from)

RN 824-72-6 CAPLUS

CN Phosphonic dichloride, P-phenyl- (CA INDEX NAME)



IT 607333-09-5P, Catechol-1,4-cyclohexanedimethanol divinyl ether-Epikote 157 copolymer 607333-10-8P, Catechol-triethylene glycol divinyl ether-Epikote 157 copolymer 607333-12-0P, 1,4-Cyclohexanedimethanol divinyl ether-hydroquinone-Epikote 157 copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermosetting poly(thio)ether composition containing hydroxy-reactive compound

for electronic device material)

RN 607333-09-5 CAPLUS

CN 1,2-Benzenediol, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane and Epikote 157 (9CI) (CA INDEX NAME)

CM 1

CRN 177403-04-2

CMF Unspecified

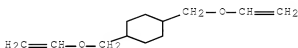
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 17351-75-6

CMF C12 H20 O2



CM 3

CRN 120-80-9

CMF C6 H6 O2



RN 607333-10-8 CAPLUS  
 CN 1,2-Benzenediol, polymer with Epikote 157 and  
 3,6,9,12-tetraoxatetradeca-1,13-diene (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 177403-04-2  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2  
 CRN 765-12-8  
 CMF C10 H18 O4



CM 3  
 CRN 120-80-9  
 CMF C6 H6 O2



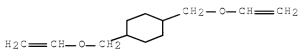
RN 607333-12-0 CAPLUS  
 CN 1,4-Benzenediol, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane and  
 Epikote 157 (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 177403-04-2  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 17351-75-6

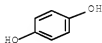
CMF C12 H20 O2



CM 3

CRN 123-31-9

CMF C6 H6 O2



L35 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:942794 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 138:14316

TITLE: Cost-effective performance enhancement of uv cured epoxysilicone release agents

INVENTOR(S): Eckberg, Richard P.

PATENT ASSIGNEE(S): General Electric Company, USA

SOURCE: U.S., 13 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6492433	B1	20021210	US 2001-920608	20010801
PRIORITY APPLN. INFO.:			US 2001-920608	20010801

AB An UV- or electron beam-curable silicone release coating composition comprises an epoxy functional silicone polymers, a vinyl ether monomer, an alkylphenol compound, and an effective amount of a bis(alkylphenyl)iodonium salt photocatalyst. Thus, a mixture of UV 9400 epoxy-functional poly(dimethylsiloxane) 100, 4-dodecylphenol 10, n-dodecyl vinyl ether 10, and photocatalyst (a 42% solution of bis(4-dodecylphenyl)iodonium hexafluorophosphate in diacetone alc.) 4 parts was prepared as a clear homogeneous solution and crosslinked to smear- and migration-free release surfaces, compared to an opaque mixture without 4-dodecylphenol and n-dodecyl vinyl ether did not cure.

IT 477602-76-9

RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)

(radiation-curable epoxy-functional polysiloxane release coatings)

containing vinyl ethers, alkylphenols and iodonium salt photocatalyst)

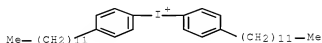
RN 477602-76-9 CAPLUS

CN Iodonium, bis(4-dodecylphenyl)-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 71786-69-1

CMF C36 H58 I



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



IT 104-40-5, 4-Nonylphenol 104-43-8, 4-Dodecylphenol

17351-75-6, 1,4-Cyclohexanedimethanol divinyl ether

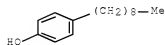
RL: TEM (Technical or engineered material use); USES (Uses)

(radiation-curable epoxy-functional polysiloxane release coatings

containing vinyl ethers, alkylphenols and iodonium salt photocatalyst)

RN 104-40-5 CAPLUS

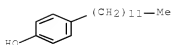
CN Phenol, 4-nonyl- (CA INDEX NAME)



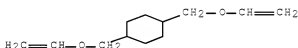
RN 104-43-8 CAPLUS

CN Phenol, 4-dodecyl- (CA INDEX NAME)





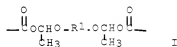
RN 17351-75-6 CAPLUS  
 CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1999:583192 CAPLUS Full-text  
 DOCUMENT NUMBER: 131:215138  
 TITLE: Preparation of polycarboxyl derivatives having solubility and compatibility with curable resins  
 INVENTOR(S): Sato, Hiroshi; Ishitoya, Masahiro  
 PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 11246544	A	19990914	JP 1998-125431	19980305
PRIORITY APPLN. INFO.:			JP 1998-125431	19980305
GI				



AB Title polycarboxyl compds. for preparing one-component curable resins is characterized by having  $\geq 2$ /mol. acid anhydride groups and 1/mol. functional group represented by the formula of I (R1: C1-24 organic group). Thus, a trimellitic anhydride dimer derivative was obtained by reaction of trimellitic anhydride 115.3 with 1,4-cyclohexanedimethyl divinyl ether 76.4, cyclohexanone 98.4, and AP-8 (phosphate catalyst) 0.15 part, showing good solubility in solvents such as xylene, Bu acetate, and methylisobutylketone, and compatibility with Epikote 828 resin solution

IT 12645-31-7

RL: CAT (Catalyst use); USES (Uses)

(AP 8, catalyst; preparation of polycarboxyl derivs. having solubility and compatibility with curable resins)

RN 12645-31-7 CAPLUS

CN Phosphoric acid, 2-ethylhexyl ester (CA INDEX NAME)

CM 1

CRN 7664-38-2

CMF H3 O4 P



CM 2

CRN 104-76-7

CMF C8 H18 O



IT 25068-38-6, Epikote 828

RL: PRP (Properties)

(preparation of polycarboxyl derivs. having solubility and compatibility

with

curable resins)

RN 25068-38-6 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane (CA INDEX NAME)

CM 1

CRN 106-89-8

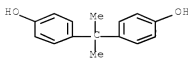
CMF C3 H5 Cl O



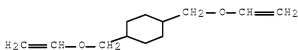
CM 2

CRN 80-05-7

CMF C15 H16 O2



IT 17351-75-6, 1,4-Cyclohexanedimethyl divinyl ether  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of polycarboxyl derivs. having solubility and compatibility  
 with curable resins)  
 RN 17351-75-6 CAPLUS  
 CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



L35 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:565055 CAPLUS Full-text

DOCUMENT NUMBER: 131:215703

TITLE: Abrasion-resistant transparent coated moldings and production methods therefor

INVENTOR(S): Shibuya, Takashi; Higuchi, Toshihiko; Kondo, Satoshi; Yamamoto, Hiroshi

PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11240101	A	19990907	JP 1998-45814	19980226
JP 3921785	B2	20070530		

PRIORITY APPLN. INFO.: JP 1998-45814 19980226

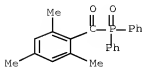
AB Moldings are coated with an inside layer containing cationically polymerizable polyfunctional compds. and cation-generating photochem. polymerization initiators and an outside layer containing silica-forming compds. Thus, an aromatic polycarbonate plate was coated with xylene containing KRM 2199, 4% (vs. the resin) SP-150, and 3% 2-(3,5-di-tert-amyl-2-hydroxyphenyl)benzotriazole, dried, and irradiated with UV to form a coating, coated with L 110 (a perhydropolysilazane solution) containing a catalyst, and heated to form a silica coating.

IT 75980-60-8, 2,4,6-Trimethylbenzoyldiphenylphosphine oxide

RL: CAT (Catalyst use); USES (Uses)  
 (abrasion-resistant transparent 2-layer coatings on polycarbonates)

RN 75980-60-8 CAPLUS

CN Methanone, (diphenylphosphinyl)(2,4,6-trimethylphenyl)- (CA INDEX NAME)



IT 151543-64-5P, Poly(1,4-cyclohexanedimethanol divinyl ether)

242151-12-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(abrasion-resistant transparent 2-layer coatings on polycarbonates)

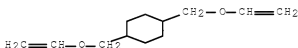
RN 151543-64-5 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]-, homopolymer (CA INDEX NAME)

CM 1

CRN 17351-75-6

CMF C12 H20 O2



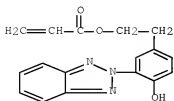
RN 242151-12-8 CAPLUS

CN 2-Propenoic acid, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 1,4-bis[(ethenyloxy)methyl]cyclohexane and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

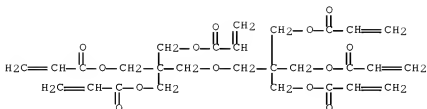
CMF C17 H15 N3 O3



CM 2

CRN 29570-58-9

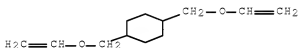
CMF C28 H34 O13



CM 3

CRN 17351-75-6

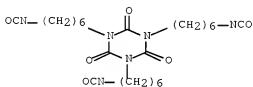
CMF C12 H20 O2



CM 4

CRN 3779-63-3

CMF C24 H36 N6 O6



L35 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:286018 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 130:325795

TITLE: Energy radiation curing process for resins containing radiation shielding

INVENTOR(S): Hayashi, Noriya; Hayashi, Shunichi

PATENT ASSIGNEE(S): Mitsubishi Heavy Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9920674	A1	19990429	WO 1998-JP4660	19981015
W: CA, CN, KR, RU, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 11193322	A	19990721	JP 1998-283867	19981006
JP 3950241	B2	20070725		
CA 2275278	A1	19990429	CA 1998-2275278	19981015
CA 2275278	C	20070626		
EP 945475	A1	19990929	EP 1998-947885	19981015
EP 945475	B1	20051228		
R: BE, DE, FR, GB, IT, NL				
RU 2226534	C2	20040410	RU 1999-115748	19981015
CN 100387631	C	20080514	CN 1998-801945	19981015
TW 467924	B	20011211	TW 1998-87117198	19981017
US 6599954	B1	20030729	US 1999-331334	19990617
JP 2005206847	A	20050804	JP 2005-113700	20050411
JP 3944217	B2	20070711		
PRIORITY APPLN. INFO.:			JP 1997-285295	A 19971017
			JP 1998-283867	A 19981006
			WO 1998-JP4660	W 19981015

OTHER SOURCE(S): MARPAT 130:325795

AB Title process, especially for carbon fiber-reinforced plastics, uses  $\geq 2$  photoinitiators, wherein the irradiation source generates a first energy of different kind, which cures the resin or generate a second energy to cure the resin. Thus, 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate (ERL 4221) 100, a photo-thermal initiator SL 80L 1.75, a cationic photopolymn. catalyst Daicat 11 0.75 parts was mixed in a glass container covered with black paper and irradiated with UV light, and the resin was cured after a few minutes.

IT 32760-80-8, Irgacure 261 75482-18-7, Daicat 11 134508-06-8, Dibenzyl-4-hydroxyphenylsulfonium hexafluoroantimonate  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalyst; energy radiation curing process for resins containing radiation shielding)

RN 32760-80-8 CAPLUS

CN Iron(1+), ( $\eta$ 5-2,4-cyclopentadien-1-yl)[(1,2,3,4,5,6- $\eta$ )-(1-methylethyl)benzene]-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

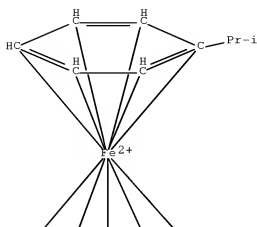
CM 1

CRN 51150-25-5

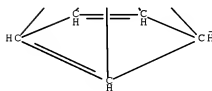
CMF C14 H17 Fe

CCI CCS

PAGE 1-A



PAGE 2-A



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

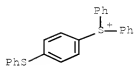


RN 75482-18-7 CAPLUS

CN Sulfonium, diphenyl[4-(phenylthio)phenyl]-, hexafluorophosphate(1-) (1:1)  
(CA INDEX NAME)

CM 1

CRN 47480-44-4  
CMF C24 H19 S2



CM 2

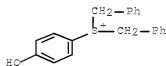
CRN 16919-18-9  
CMF F6 P  
CCI CCS



RN 134508-06-8 CAPLUS  
CN Sulfonium, (4-hydroxyphenyl)bis(phenylmethyl)-,  
(OC-6-11)-hexafluoroantimonate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 134507-87-2  
CMF C20 H19 O S



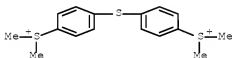
CM 2

CRN 17111-95-4  
CMF F6 Sb  
CCI CCS





IT 106611-10-3, Bis[4-(dimethylsulfonio)phenyl] sulfide  
 bis(hexafluorophosphate)  
 RL: CAT (Catalyst use); USES (Uses)  
 (energy radiation curing process for resins containing radiation shielding)  
 RN 106611-10-3 CAPLUS  
 CN Sulfonium, (thiodi-4,1-phenylene)bis[dimethyl-,  
 bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 106611-09-0  
 CMF C16 H20 S3

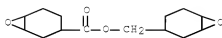


CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



IT 77272-87-8P 143685-65-8P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (energy radiation curing process for resins containing radiation shielding)  
 RN 77272-87-8 CAPLUS  
 CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid,  
 7-oxabicyclo[4.1.0]hept-3-ylmethyl ester, polymer with  
 2-(chloromethyl)oxirane and 4,4'-(1-methylethyldiene)bis[phenol] (CA  
 INDEX NAME)

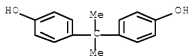
CM 1  
 CRN 2386-87-0  
 CMF C14 H20 O4



CM 2  
 CRN 106-89-8  
 CMF C3 H5 C1 O

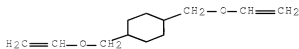


CM 3  
 CRN 80-05-7  
 CMF C15 H16 O2



RN 143685-65-8 CAPLUS  
 CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with  
 1,4-bis[(ethenyloxy)methyl]cyclohexane and (chloromethyl)oxirane (9CI)  
 (CA INDEX NAME)

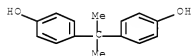
CM 1  
 CRN 17351-75-6  
 CMF C12 H20 O2



CM 2  
 CRN 106-89-8  
 CMF C3 H5 Cl O



CM 3  
 CRN 80-05-7  
 CMF C15 H16 O2

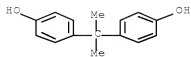


IT 25068-38-6, Epikote 828 29407-84-9, Epikote 815  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (energy radiation curing process for resins containing radiation shielding)  
 RN 25068-38-6 CAPLUS  
 CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with  
 2-(chloromethyl)oxirane (CA INDEX NAME)

CM 1  
 CRN 106-89-8  
 CMF C3 H5 Cl O



CM 2  
 CRN 80-05-7  
 CMF C15 H16 O2



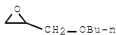
RN 29407-84-9 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with  
2-(butoxymethyl)oxirane and 2-(chloromethyl)oxirane (CA INDEX NAME)

CM 1

CRN 2426-08-6

CMF C7 H14 O2



CM 2

CRN 106-89-8

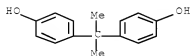
CMF C3 H5 Cl O



CM 3

CRN 80-05-7

CMF C15 H16 O2



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:684459 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 127:332868  
 ORIGINAL REFERENCE NO.: 127:65361a,65364a  
 TITLE: Light polymerizable composition for putty and coatings  
 INVENTOR(S): Ostlie, Brian W.  
 PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA  
 SOURCE: PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9738054	A1	19971016	WO 1997-US5706	19970331
W: BR, CA, CN, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2248616	A1	19971016	CA 1997-2248616	19970331
EP 883653	A1	19981216	EP 1997-920174	19970331
R: DE, ES, FR, GB, IT				
CN 1215421	A	19990428	CN 1997-193640	19970331
BR 9708589	A	19990803	BR 1997-8589	19970331
JP 2000508685	T	20000711	JP 1997-536395	19970331
US 5876805	A	19990302	US 1997-951867	19971016
KR 2000005235	A	20000125	KR 1998-7922	19981002
KR 2000005235	A	20000125	KR 1998-707922	19981002
PRIORITY APPLN. INFO.:			US 1996-628420	A 19960405
			WO 1997-US5706	W 19970331

AB Visible light polymerizable compns. comprise  $\geq 1$  monomer or oligomer having a plurality of free-radically polymerizable ethylenically unsatd. groups,  $\geq 1$  compound having a plurality of thiol groups,  $\geq 1$  acyl phosphine oxide photoinitiator, and optional adjuvants, such as stabilizers, pigments, fillers, and polymerization inhibitors. The polymerized compns. are useful, as protective coatings, or chip-resistant coatings or as repair putties on exterior coated substrates such as plastics, wood and metal, especially for the automotive and marine industries. Component A of 1,4-cyclohexanedimethanol divinyl ether, pentaerythritol triacrylate, fumed silica, TiO<sub>2</sub>, Irgacure 1700, pyrogallol inhibitor was mixed with component B of pentaerythritol tetramercaptopropionate and sprayed onto a clean steel panel and exposed to fluorescent light prior to finish coating. The coatings had good chip-resistant properties.

IT 87-66-1, Pyrogallol  
 RL: CAT (Catalyst use); USES (Uses)  
 (inhibitor; visible light curable composition for films, putty and protective coatings over steel)  
 RN 87-66-1 CAPLUS  
 CN 1,2,3-Benzenetriol (CA INDEX NAME)

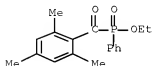


IT 84434-11-7, Lr 8893x 174285-64-4, Irgacure 1700  
 RL: CAT (Catalyst use); USES (Uses)

(photoinitiator; visible light curable composition for films, putty and protective coatings over steel)

RN 84434-11-7 CAPLUS

CN Phosphinic acid, P-phenyl-P-(2,4,6-trimethylbenzoyl)-, ethyl ester (CA INDEX NAME)



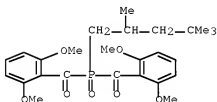
RN 174285-64-4 CAPLUS

CN 1-Propanone, 2-hydroxy-2-methyl-1-phenyl-, mixt. with bis(2,6-dimethoxybenzoyl)(2,4,4-trimethylpentyl)phosphine oxide (CA INDEX NAME)

CM 1

CRN 145052-34-2

CMF C26 H35 O7 P



CM 2

CRN 7473-98-5

CMF C10 H12 O2



IT 197896-82-5P 197896-83-6P 197896-84-7P

197896-87-0P 197896-89-2P 197896-90-5P

197896-92-7P 197896-93-8P 197896-94-9P

197896-95-0P 197896-96-1P 197896-97-2P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(visible light curable composition for films, putty and protective coatings over steel)

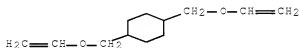
RN 197896-82-5 CAPLUS

CN 2-Propenoic acid, 1,1'-[2-ethyl-2-[[[(1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane and 1,1'-[2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl] bis(3-mercaptopropanoate) (CA INDEX NAME)

CM 1

CRN 17351-75-6

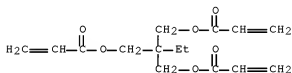
CMF C12 H20 O2



CM 2

CRN 15625-89-5

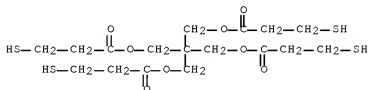
CMF C15 H20 O6



CM 3

CRN 7575-23-7

CMF C17 H28 O8 S4



RN 197896-83-6 CAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate) and 2,2'-[1,2-



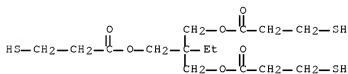


RN 197896-84-7 CAPLUS  
 CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2'-[1,2-ethanediylbis(oxy)]bis[ethanethiol] and 2-ethyl-2-[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate) (9CI) (CA INDEX NAME)

CM 1

CRN 33007-83-9

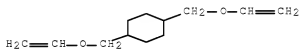
CMF C15 H26 O6 S3



CM 2

CRN 17351-75-6

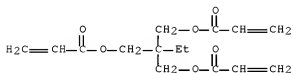
CMF C12 H20 O2



CM 3

CRN 15625-89-5

CMF C15 H20 O6



CM 4

CRN 14970-87-7

CMF C6 H14 O2 S2



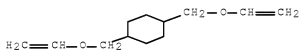
RN 197896-87-0 CAPLUS

CN 2-Propenoic acid, 2-(hydroxymethyl)-2-[[ (1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane and 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate) (9CI) (CA INDEX NAME)

CM 1

CRN 17351-75-6

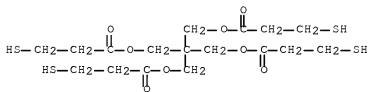
CMF C12 H20 O2



CM 2

CRN 7575-23-7

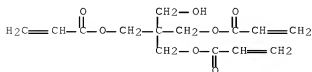
CMF C17 H28 O8 S4



CM 3

CRN 3524-68-3

CMF C14 H18 O7



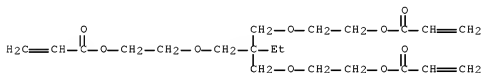
RN 197896-89-2 CAPLUS

CN 2-Propenoic acid, [2-ethyl-2-[[2-[(1-oxo-2-propenyl)oxy]ethoxy]methyl]-1,3-propanediyl]bis(oxy-2,1-ethanediyl) ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropionate), 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 1,1'-[oxybis(2,1-ethanediyl)oxy]]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 75577-70-7

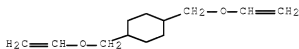
CMF C21 H32 O9



CM 2

CRN 17351-75-6

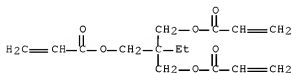
CMF C12 H20 O2



CM 3

CRN 15625-89-5

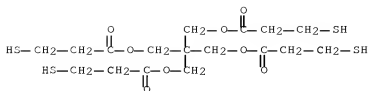
CMF C15 H20 O6



CM 4

CRN 7575-23-7

CMF C17 H28 O8 S4



CM 5

CRN 764-99-8

CMF C8 H14 O3



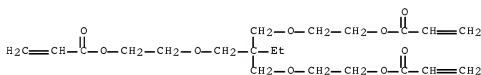
RN 197896-90-5 CAPLUS

CN 2-Propenoic acid, [2-ethyl-2-[[2-[(1-oxo-2-propenyl)oxy]ethoxy]methyl]-1,3-propanediyl]bis(oxy-2,1-ethanediyl) ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropionate) and 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 75577-70-7

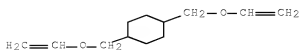
CMF C21 H32 O9



CM 2

CRN 17351-75-6

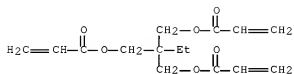
CMF C12 H20 O2



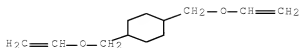
CM 3

CRN 15625-89-5

CMF C15 H20 O6

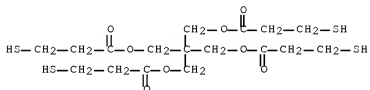


CRN 17351-75-6  
CMF C12 H20 O2



CM 3

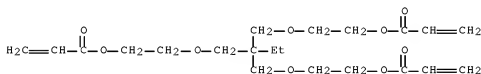
CRN 7575-23-7  
CMF C17 H28 O8 S4



RN 197896-93-8 CAPLUS  
CN 2-Propenoic acid, [2-ethyl-2-[[2-[(1-oxo-2-propenyl)oxy]ethoxy)methyl]-1,3-propanediyl]bis(oxy-2,1-ethanediyl) ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate) and 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

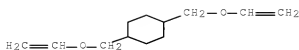
CM 1

CRN 75577-70-7  
CMF C21 H32 O9



CM 2

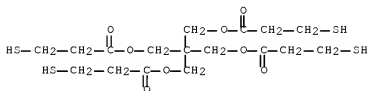
CRN 17351-75-6  
CMF C12 H20 O2



CM 3

CRN 7575-23-7

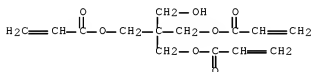
CMF C17 H28 O8 S4



CM 4

CRN 3524-68-3

CMF C14 H18 O7



RN 197896-94-9 CAPLUS

CN 2-Propenoic acid, 2-(hydroxymethyl)-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropionate) and  $\alpha$ -hydro- $\omega$ -[(1-oxo-2-propenyl)oxy][poly(oxy-1,2-ethanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

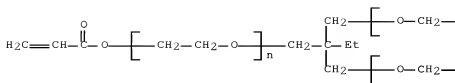
CM 1

CRN 28961-43-5

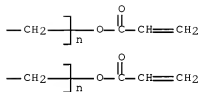
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C15 H20 O6

CCI PMS

PAGE 1-A



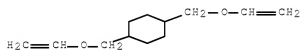
PAGE 1-B



CM 2

CRN 17351-75-6

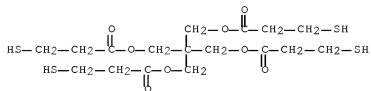
CMF C12 H20 O2



CM 3

CRN 7575-23-7

CMF C17 H28 O8 S4

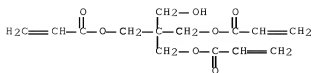


CM 4

CRN 3524-68-3



CMF C14 H18 O7



RN 197896-95-0 CAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropionate) and  $\alpha$ -hydro- $\omega$ -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

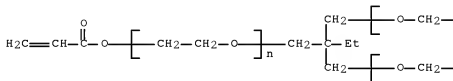
CM 1

CRN 28961-43-5

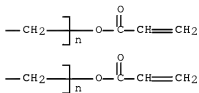
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C15 H20 O6

CCI PMS

PAGE 1-A



PAGE 1-B



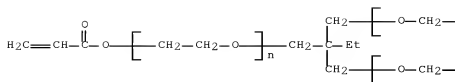
CM 2

CRN 17351-75-6

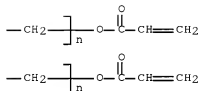
CMF C12 H20 O2



PAGE 1-A



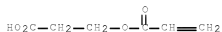
PAGE 1-B



CM 2

CRN 24615-84-7

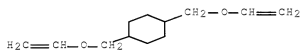
CMF C6 H8 O4



CM 3

CRN 17351-75-6

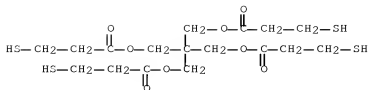
CMF C12 H20 O2



CM 4

CRN 7575-23-7

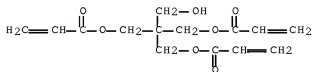
CMF C17 H28 O8 S4



CM 5

CRN 3524-68-3

CMF C14 H18 O7



RN 197896-97-2 CAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropionate), 2-carboxyethyl 2-propenoate and  $\alpha$ -hydro- $\omega$ -[(1-oxo-2-propenyl)oxy][poly(oxy-1,2-ethanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (9CI) (CA INDEX NAME)

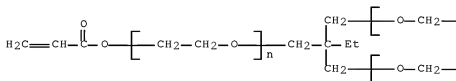
CM 1

CRN 28961-43-5

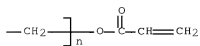
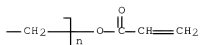
CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C15 H20 O6

CCI PMS

PAGE 1-A



PAGE 1-B



CM 2

CRN 24615-84-7

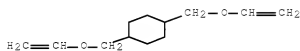
CMF C6 H8 O4



CM 3

CRN 17351-75-6

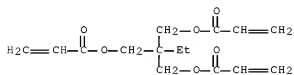
CMF C12 H20 O2



CM 4

CRN 15625-89-5

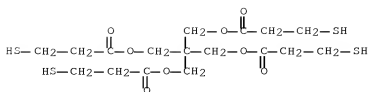
CMF C15 H20 O6



CM 5

CRN 7575-23-7

CMF C17 H28 O8 S4

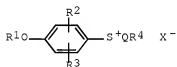


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1992:236826 CAPLUS Full-text  
 DOCUMENT NUMBER: 116:236826  
 ORIGINAL REFERENCE NO.: 116:40137a, 40140a  
 TITLE: UV-curable resin compositions and cured products  
 INVENTOR(S): Endo, Takeshi; Yokoshima, Minoru; Hamatsu, Tomio  
 PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan; Sanshin Chemical Industry Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04011609	A	19920116	JP 1990-113995	19900427
PRIORITY APPLN. INFO.:			JP 1990-113995	19900427
OTHER SOURCE(S):	MARPAT 116:236826			

GI



AB Rapid-curing title compns. giving products, e.g. coatings, adhesives, with good adhesion and solvent resistance, comprise (meth)acrylates and/or epoxy resins, compds. containing  $\geq 2$  vinyl ether groups, sulfonium salts I [R1 = H, alkyl, COY; R2-3 = H, halo, alkyl; Q, R4 = (un)substituted alkyl; Y = (un)substituted alkyl, alkoxy, Ph, OPh; X = SbF6, PF6, AsF6, BF4], and optionally photoinitiators. Thus, treating PTMG 700, neopentyl glycol 67.6, and IPDI 444.6 parts at 80° for 10 h and subsequent reaction with 244 parts 2-hydroxyethyl acrylate in presence of methoquinone gave 1456 parts urethane acrylate, 40 parts of which was blended with triethylene glycol divinyl ether (II) 60, p-nitrobenzyl-(4-hydroxyphenyl)methylsulfonium hexafluoroantimonate (III) 0.15, and Irgacure 184 2.0 parts to give title composition A printed

paper was coated with the composition and irradiated by UV to form a hard coating by 69 mJ/cm<sup>2</sup> irradiation, vs. 138 for a control containing tripropylene glycol diacrylate instead of II and III.

IT 25068-38-6, Epikote 828

RL: USES (Uses)

(UV-curable compns. containing vinyl ethers and, fast-curing)

RN 25068-38-6 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane (CA INDEX NAME)

CM 1

CRN 106-89-8

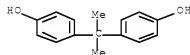
CMF C3 H5 Cl O



CM 2

CRN 80-05-7

CMF C15 H16 O2



IT 125662-43-3P 133152-70-2P 133152-90-6P

141545-63-3P

RL: PREP (Preparation)

(preparation of, UV-curable acrylate or epoxy resin compns. containing, fast-curing)

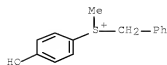
RN 125662-43-3 CAPLUS

CN Sulfonium, (4-hydroxyphenyl)methyl(phenylmethyl)-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 125662-41-1

CMF C14 H15 O S



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



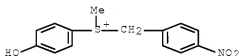
RN 133152-70-2 CAPLUS

CN Sulfonium, (4-hydroxyphenyl)methyl[(4-nitrophenyl)methyl]-,  
(OC-6-11)-hexafluoroantimonate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 133152-69-9

CMF C14 H14 N O3 S



CM 2

CRN 17111-95-4

CMF F6 Sb

CCI CCS



RN 133152-90-6 CAPLUS

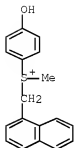
CN Sulfonium, (4-hydroxyphenyl)methyl(1-naphthalenylmethyl)-,  
hexafluorophosphate(1-) (1:1) (CA INDEX NAME)



CM 1

CRN 133152-66-6

CMF C18 H17 O S



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



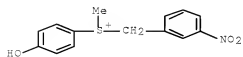
RN 141545-63-3 CAPLUS

CN Sulfonium, (4-hydroxyphenyl)methyl[(3-nitrophenyl)methyl]-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 133177-52-3

CMF C14 H14 N O3 S

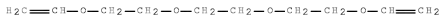


CM 2

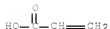
CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



IT 141503-95-9P 141545-43-9P  
 RL: PREP (Preparation)  
 (preparation of, coatings, UV-cured, with good solvent resistance and adhesion)  
 RN 141503-95-9 CAPLUS  
 CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 2-propenoate, polymer with 3,6,9,12-tetraoxatetradeca-1,13-diene (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 765-12-8  
 CMF C10 H18 O4



CM 2  
 CRN 55818-57-0  
 CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2  
 CM 3  
 CRN 79-10-7  
 CMF C3 H4 O2



CM 4  
 CRN 25068-38-6  
 CMF (C15 H16 O2 . C3 H5 Cl O)x

CCI PMS

CM 5

CRN 106-89-8

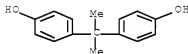
CMF C3 H5 Cl O



CM 6

CRN 80-05-7

CMF C15 H16 O2



RN 141545-43-9 CAPLUS

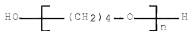
CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with  
 1,4-bis[(ethenyloxy)methyl]cyclohexane, 2,2-dimethyl-1,3-propanediol,  
 $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,4-butanediyl),  
 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and  
 3,6,9,12-tetraoxatetradeca-1,13-diene (9CI) (CA INDEX NAME)

CM 1

CRN 25190-06-1

CMF (C4 H8 O)<sub>n</sub> H2 O

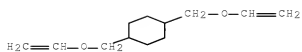
CCI PMS



CM 2

CRN 17351-75-6

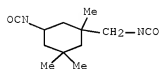
CMF C12 H20 O2



CM 3

CRN 4098-71-9

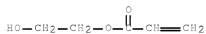
CMF C12 H18 N2 O2



CM 4

CRN 818-61-1

CMF C5 H8 O3



CM 5

CRN 765-12-8

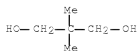
CMF C10 H18 O4



CM 6

CRN 126-30-7

CMF C5 H12 O2



IT 141503-97-1P

RL: PREP (Preparation)

(preparation of, epoxy resin coatings containing, UV-cured, with good

solvent

resistance and adhesion)

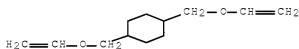
RN 141503-97-1 CAPLUS

CN 3,6,9,12-Tetraoxatetradeca-1,13-diene, polymer with  
1,4-bis[(ethenyloxy)methyl]cyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 17351-75-6

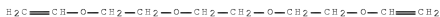
CMF C12 H20 O2



CM 2

CRN 765-12-8

CMF C10 H18 O4



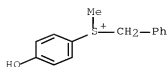
IT 132733-08-5 133152-68-8 133152-71-3

141545-62-2

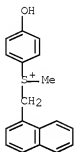
RL: RCT (Reactant); RACT (Reactant or reagent)

(salt exchange reaction of)

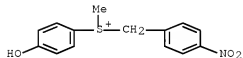
RN 132733-08-5 CAPLUS

CN Sulfonium, (4-hydroxyphenyl)methyl(phenylmethyl)-, chloride (1:1) (CA  
INDEX NAME)● Cl<sup>-</sup>

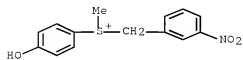
RN 133152-68-8 CAPLUS

CN Sulfonium, (4-hydroxyphenyl)methyl(1-naphthalenylmethyl)-, chloride (1:1)  
(CA INDEX NAME)

RN 133152-71-3 CAPLUS

CN Sulfonium, (4-hydroxyphenyl)methyl[(4-nitrophenyl)methyl]-, chloride (1:1)  
(CA INDEX NAME)

RN 141545-62-2 CAPLUS

CN Sulfonium, (4-hydroxyphenyl)methyl[(3-nitrophenyl)methyl]-, chloride (1:1)  
(CA INDEX NAME)

L35 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1991:682175 CAPLUS Full-text  
 DOCUMENT NUMBER: 115:282175  
 ORIGINAL REFERENCE NO.: 115:47933a,47936a  
 TITLE: Alkenyl ethers and radiation-curable compositions  
 INVENTOR(S): Vara, Fulvio J.; Dougherty, James A.; Plotkin, Jeffrey  
 S.; Narayanan, Kolazi S.; Taylor, Paul D.  
 PATENT ASSIGNEE(S): ISP Investments, Inc., USA  
 SOURCE: PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9111467	A1	19910808	WO 1990-US6758	19901123
RW: AU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5039716	A	19910813	US 1990-470489	19900126
US 5045572	A	19910903	US 1990-470487	19900126
AU 9168936	A	19910821	AU 1991-68936	19901123
CA 2031114	A1	19910727	CA 1990-2031114	19901129
US 5055357	A	19911008	US 1991-670649	19910318
US 5094917	A	19920310	US 1991-672249	19910320
PRIORITY APPLN. INFO.:			US 1990-470487	A 19900126
			US 1990-470489	A 19900126
			WO 1990-US6758	A 19901123

OTHER SOURCE(S): MARPAT 115:282175

AB The title compds. comprise (X)<sub>4</sub>-nSi(OR1OCH:CHR)<sub>2</sub>n (I) (X = halogen, OR, H, optionally mixed; R = lower alkyl; ; R1 = C1-8 alkylene, alkenylene, alkynylene, optionally alkoxylated; R2 = H, lower alkyl; n = 1-4) or A[(CH2O)mZrCH:CHR]<sub>n</sub> (II) [A = carbon atom, OCH:CHR or (C1-10 alkyl)<sub>4</sub>-n; R = C1-6 alkyl; Z = C2-8 alkylenoxy; r = 0-6; m = 0-1; n = 1-4; provided that m = 0 and n = 1 when A = OCH:CHR, n = 2 or 3 when A = (C1-10 alkyl)<sub>4</sub>-n and n = 4 when A = carbon]. A radiation-curable composition comprises 0.1-5 weight% photoinitiator (containing ≥25% cationic photoinitiator); 30-99 weight% vinyl ether, epoxy ether, epoxy acrylate and/or vinyloxy alkyl urethane; and 1-60 weight% I; similar compns. contained II. The compns. are fast curing (<1 s) and useful for coatings. Thus, hydroxybutyl vinyl ether, (EtO)<sub>4</sub>Si, and KOH were reacted at 55-60° evolving EtOH, and was then the mixt, was heated to 110°, evolving more EtOH. Distilling the product gave a main fraction at 100-200°/3 mm containing an 85:15 (%) tris(vinyloxybutyl) Et orthosilicate/bis(vinyloxybutyl) and o-silicate mixture (III). III 50, Epon 828 50, FC-430 fluorochem. surfactant 1, FX-512 cationic photoinitiator 4 parts were heated at 50° for homogeneity. Coating on a Al substrate at 1.2 mil and exposing for less than 1 s to 400 mJ/cm<sup>2</sup> UV radiation gave a tack-free film which was post-cured at 177° to give tensile hardness F, double MEK rubs >100, and reverse impact <10.

IT 57835-99-1, Triphenylsulfonium hexafluorophosphate  
 RL: USES (Uses)  
 (coatings containing, alkenyl ether-based, UV-curable, abrasion-resistant)

RN 57835-99-1 CAPLUS

CN Sulfonium, triphenyl-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

CM 1

CRN 18393-55-0

CMF C18 H15 S



CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



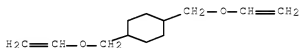
IT 17351-75-6

RL: USES (Uses)

(coatings containing, photocurable, on polyester)

RN 17351-75-6 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



IT 137340-17-1

RL: TEM (Technical or engineered material use); USES (Uses)

(coatings, photocurable, chemical-resistant)

RN 137340-17-1 CAPLUS

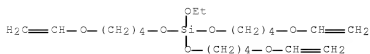
CN Silicic acid (H4SiO4), bis[4-(ethenyloxy)butyl] monoethyl ester, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and silicic acid (H4SiO4) tris[4-(ethenyloxy)butyl] ethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 137340-16-0

CMF C20 H38 O7 Si

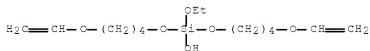




CM 2

CRN 137340-15-9

CMF C14 H28 O6 Si



CM 3

CRN 106-89-8

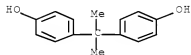
CMF C3 H5 Cl O



CM 4

CRN 80-05-7

CMF C15 H16 O2



REFERENCE COUNT: 5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L35 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:610383 CAPLUS Full-text

DOCUMENT NUMBER: 115:210383

ORIGINAL REFERENCE NO.: 115:35885a, 35888a

TITLE: Crosslinkable vinyl ether polyacetal oligomers  
 INVENTOR(S): Dougherty, James A.; Plotkin, Jeffrey S.; Vara, Fulvio J.; Narayanan, Kolazi S.  
 PATENT ASSIGNEE(S): GAF Chemicals Corp., USA  
 SOURCE: U.S., 5 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5036112	A	19910730	US 1990-470488	19900126
WO 9111466	A1	19910808	WO 1990-US6713	19901119
W: AU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9169624	A	19910821	AU 1991-69624	19901119
CA 2030673	A1	19910727	CA 1990-2030673	19901122
PRIORITY APPLN. INFO.:			US 1990-470488	A 19900126
			WO 1990-US6713	A 19901119
AB	The title compns., useful in coatings and films rapidly cured by radiation, comprise (oligomeric) vinyl ethers, epoxides, acrylates, or vinyloxyalkyl urethanes, photoinitiators (containing $\geq 25\%$ cationic photoinitiators), and divinyl ether polyacetal oligomers. A divinyl ether acetal oligomer (I) was prepared from 1.2 mol butanediol divinyl ether and 1.0 mol bisphenol A. A mixture of I 50, triethylene glycol divinyl ether 50, surfactant 1.0, and triphenylsulfonium hexafluorophosphate initiator solution 4.0 g was applied to A1 and cured with 400 mJ/cm <sup>2</sup> UV and post-cured 10 min at 177°, giving a coating with pencil hardness 2 H, adhesion 92%, and MEK resistance 13 double rubs for a 1 mil-thick coating.			
IT	57835-99-1, Triphenyl sulfonium hexafluorophosphate			
	RL: USES (Uses) (cationic photoinitiators, for divinyl ether polyacetal oligomer-vinyl compound coatings)			
RN	57835-99-1 CAPLUS			
CN	Sulfonium, triphenyl-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)			
CM	1			
CRN	18393-55-0			
CMF	C18 H15 S			



CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



IT 137024-60-3 137024-61-4 137024-62-5  
 137024-63-6 137024-64-7  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coatings, cationic photoinitiators for curing of)  
 RN 137024-60-3 CAPLUS  
 CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with  
 1,4-bis(ethenyloxy)butane and 3,6,9,12-tetraoxatetradeca-1,13-diene (9CI)  
 (CA INDEX NAME)

CM 1

CRN 3891-33-6

CMF C8 H14 O2



CM 2

CRN 765-12-8

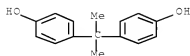
CMF C10 H18 O4



CM 3

CRN 80-05-7

CMF C15 H16 O2



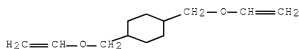
RN 137024-61-4 CAPLUS  
 CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with

1,4-bis[(ethenyloxy)methyl]cyclohexane and  
3,6,9,12-tetraoxatetradeca-1,13-diene (9CI) (CA INDEX NAME)

CM 1

CRN 17351-75-6

CMF C12 H20 O2



CM 2

CRN 765-12-8

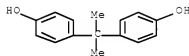
CMF C10 H18 O4



CM 3

CRN 80-05-7

CMF C15 H16 O2



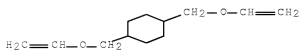
RN 137024-62-5 CAPLUS

CN Phenol, 4,4'-(1-methylethylidene)bis-, polymer with  
1,4-bis[(ethenyloxy)methyl]cyclohexane and  
2,2'-[1,4-butanediylbis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 17351-75-6

CMF C12 H20 O2



CM 2

CRN 2425-79-8

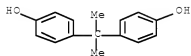
CMF C10 H18 O4



CM 3

CRN 80-05-7

CMF C15 H16 O2



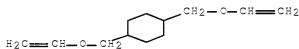
RN 137024-63-6 CAPLUS

CN 2-Propenoic acid, 1,6-hexanediyl ester, polymer with  
 1,4-bis[(ethenyloxy)methyl]cyclohexane and  
 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 17351-75-6

CMF C12 H20 O2



CM 2

CRN 13048-33-4

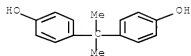
CMF C12 H18 O4



CM 3

CRN 80-05-7

CMF C15 H16 O2



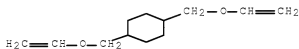
RN 137024-64-7 CAPLUS

CN 2-Propenoic acid, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester, polymer  
with 1,4-bis[(ethenyloxy)methyl]cyclohexane and  
4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 17351-75-6

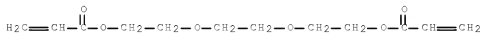
CMF C12 H20 O2



CM 2

CRN 1680-21-3

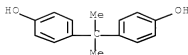
CMF C12 H18 O6



CM 3

CRN 80-05-7

CMF C15 H16 O2



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

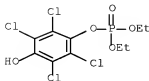
L35 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1968:432031 CAPLUS Full-text  
 DOCUMENT NUMBER: 69:32031  
 ORIGINAL REFERENCE NO.: 69:5975a,5978a  
 TITLE: Photographic metal salt process  
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.  
 SOURCE: Fr., 13 pp.  
 CODEN: FRXXAK  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	FR 1495784		19670922	FR 1966-78607	19661003
AB	Fine-grained metal images of high resolution are obtained by exposure of salts of a strong acid (fluorinated alkanesulfonic acids) with a light-absorbing sensitizer to decompose the salt with liberation of acid, followed by heating to 100-70° for <5 min. The salt may be of Ag, Hg, or Cu, especially CF <sub>3</sub> CHFCF <sub>2</sub> SO <sub>3</sub> Ag; the sensitizer is a photoreducible ketone or dye. A film-forming thermoplastic polymeric binder [poly(vinyl acetate) of mol. weight >10,000] is used at the rate of 100 parts per 4-50 parts of metal salt for coating on a paper, film, or metal support. Thus, a 15% poly(vinyl formal) solution in EtOH-PhMe 40:60 15 g., CF <sub>3</sub> CHFCF <sub>2</sub> SO <sub>3</sub> Ag 0.5 g., 9,10-phenanthrenequinone 0.13 g., and dioxane 4 cc. are coated on polyester film, exposed through a neg. for 5 sec. to a Sylvania Sun Gun lamp at a distance of 31.5 cm., and heated for 1 min. at 150°. The black image can be fixed by washing with water and removal of the unexposed coating with dioxane. Another method of fixation is thermal transfer of the unexposed areas to another support where they can serve to yield a reverse image.				
IT	78-40-0 7596-61-4 7598-61-0 17351-75-6 RL: USES (Uses) (photothermographic copy sheets containing)				
RN	78-40-0 CAPLUS				
CN	Phosphoric acid, triethyl ester (CA INDEX NAME)				



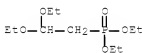
RN 7596-61-4 CAPLUS  
 CN Phosphoric acid, diethyl 2,3,5,6-tetrachloro-4-hydroxyphenyl ester (CA

INDEX NAME)



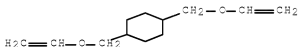
RN 7598-61-0 CAPLUS

CN Phosphonic acid, P-(2,2-diethoxyethyl)-, diethyl ester (CA INDEX NAME)



RN 17351-75-6 CAPLUS

CN Cyclohexane, 1,4-bis[(ethenyloxy)methyl]- (CA INDEX NAME)



=&gt; d his ful

(FILE 'HOME' ENTERED AT 10:46:52 ON 19 JUN 2009)

FILE 'REGISTRY' ENTERED AT 10:47:34 ON 19 JUN 2009

L1 1 SEA SPE=ON ABB=ON PLU=ON PHENOL/CN  
 D  
 L2 STR 108-95-2  
 L3 50 SEA SSS SAM L2  
 L4 STR  
 L5 47 SEA SSS SAM L4  
 L6 50 SEA SSS SAM L2 AND L4  
 L7 SCR 1701  
 L8 50 SEA SSS SAM L7 AND L2 AND L4  
 L9 50 SEA SSS SAM L7 AND L2 AND L4  
 L10 710579 SEA SSS FUL L7 AND L2 AND L4  
 L11 710552 SEA SPE=ON ABB=ON PLU=ON L10/COM

FILE 'CAPLUS' ENTERED AT 10:54:41 ON 19 JUN 2009

E US2005-560815/APPS

L12 1 SEA SPE=ON ABB=ON PLU=ON US2005-560815/AP



SEL RN

FILE 'REGISTRY' ENTERED AT 10:55:08 ON 19 JUN 2009  
L13 7 SEA SPE=ON ABB=ON PLU=ON (382596-16-9/BI OR 60676-86-0/BI  
OR 830351-48-9/BI OR 830351-49-0/BI OR 830351-51-4/BI OR  
830351-52-5/BI OR 830351-54-7/BI)  
D SCA  
L14 STR  
L15 0 SEA SSS SAM L14  
L16 STR L14  
L17 0 SEA SSS SAM L16  
L18 STR  
L19 0 SEA SSS SAM L18  
L20 272 SEA SSS FUL L18  
L21 STR  
L22 0 SEA SSS SAM L21  
L23 0 SEA SSS FUL L21  
D SCA L13

FILE 'CAPLUS' ENTERED AT 11:12:10 ON 19 JUN 2009  
L24 325 SEA SPE=ON ABB=ON PLU=ON L20  
L25 1 SEA SPE=ON ABB=ON PLU=ON L24 AND L12

FILE 'REGISTRY' ENTERED AT 11:12:31 ON 19 JUN 2009

FILE 'CAPLUS' ENTERED AT 11:12:33 ON 19 JUN 2009  
L26 TRA PLU=ON L24 1- RN : 2814 TERMS

FILE 'REGISTRY' ENTERED AT 11:12:41 ON 19 JUN 2009  
L27 2814 SEA SPE=ON ABB=ON PLU=ON L26  
L28 73 SEA SPE=ON ABB=ON PLU=ON L27 AND P/ELS  
L29 STR  
L30 9 SEA SUB=L27 SSS SAM L29  
L31 196 SEA SUB=L27 SSS FUL L29

FILE 'CAPLUS' ENTERED AT 11:13:45 ON 19 JUN 2009  
L32 21 SEA SPE=ON ABB=ON PLU=ON L20 AND L31 AND L28  
L33 1 SEA SPE=ON ABB=ON PLU=ON L12 AND L32  
D SCA  
L34 2 SEA SPE=ON ABB=ON PLU=ON L32 AND (?FIRE? OR ?FLAME?)  
D SCA  
L35 19 SEA SPE=ON ABB=ON PLU=ON L32 NOT L34

FILE 'CAPLUS' ENTERED AT 11:15:40 ON 19 JUN 2009  
D QUE L34  
D L34 IBIB ABS HITIND HITSTR TOT  
D QUE L35  
D L35 IBIB ABS HITSTR TOT

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 18 JUN 2009 HIGHEST RN 1159095-43-8  
DICTIONARY FILE UPDATES: 18 JUN 2009 HIGHEST RN 1159095-43-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

#### FILE CAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 19 Jun 2009 VOL 150 ISS 26  
FILE LAST UPDATED: 18 Jun 2009 (20090618/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.